DEFENSE INFORMATION SYSTEMS AGENCY FY 2002 BUDGET ESTIMATE R-1 EXHIBIT

Program Element	FY 2000	FY 2001	FY 2002
0305108K C2 Research	1,953	0	0
Total Applied Research (BA 2)	1,953	0	0
0303129K Defense Message System (DMS)	0	10,778	11,423
0303140K Information Systems Security Program (ISSP)	0	19,778	11,423
0303141K Global Combat Support System (GCSS)	0	20,834	16,483
0305840K Electronic Commerce (EC)	0	26,703	25,519
0604764K Advanced IT Services Joint Program Office	13,026	12,933	14,254
Total Engineering & Manufacturing Development (BA 5)	13,026	91,028	79,446
0605801K Defense Technical Information Services	45,495	44,187	44,228
Total RDT&E Management Support (BA 6)	45,495	44,187	44,228
0208045K C4I Interoperability	25,999	35,672	41,389
0302016K NMCS-Wide Support	497	610	1,014
0302019K Defense Info. Infras.(DII) Engin. & Integ.	4,621	6,773	6,544
0303126K Long Haul Communications	1,205	1,346	10,744
0303127K Support of the Nat. Comm. Sys. (NCS)	3,373	4,235	4,968
0303131K Min. Essen. Emerg. Comm. Netw. (MEECN)	4,660	7,223	6,988
0303149K C4I for the Warrior	250	401	0
0303153K Joint Spectrum Center	8,357	8,198	8,849
0303610K Teleport Program	0	4,500	14,371
Total Operational System Develop. (BA 7)	48,962	68,958	94,867
TOTAL DISA RDT&E	109,436	204,173	218,541

UNCLASSIFIED

Exhibi	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Defense Message System (DMS)/P.E. 0303129K					
COST (in millions)	FY00	FY01	FY02		Cost to Complete					Total Cost
Defense Message System/DM01	0	10.778*	11.423						Contg	Contg

A. Mission Description & Budget Item Justification:

The Defense Message System (DMS) is the Warfighter's Message System. The DMS was established in response to Joint Staff validated messaging requirements which establish the need for writer-to-reader messaging service that is accessible from world wide Department of Defense (DDD) locations, by tactically deployed users, and other designated Federal Government users, with interfaces to Allied users and Defense Contractors. As a value-added service of the Defense Information Infrastructure (DII), the DMS incorporates state-of-the-art messaging, directory, security, and management technologies to provide those capabilities needed to support the DII objective goals. In FY02, DMS will field Release 3.0 which will focus on essential Intelligence Community requirements and provide automated access controls for compartments, code words and caveats using ACP 120 implementation of the Common Security Protocol (CSP). DMS will also start Release 3.1 in FY02. This program element is under Budget Activity 5 because it involves the development of major upgrades that increase the performance of existing systems. The security portion of the DMS RDT&E budget is within PE 0303140K and is explained in a separate budget exhibit that follows. This is not duplication of effort.

* This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2001, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent Departmental quidance regarding Information Technology budgeting.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibit R-2, RDT&E Budget Item Justification									DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Defense Message System (DMS)/P.E. 0303129K						
COST (in millions)							Cost to Complete	Total Cost			
Defense Message System/DM01	0	10.778	11.423						Contg	Contg	

FY2001 Plan

- o Field and Enhance Release 2.2. The DMS program will test and field enhancements (maintenance releases) to Release 2.2. DMS implements and fields system capabilities through a series of coordinated product releases. (1st 4th Qtr, \$2.000M)
- o Deliver Release 3.0. Release 3.0 provides classified organizational messaging through Top Secret/Special Compartmented Information (SCI). (1^{st} 2^{nd} Qtr, \$5.338M)
- o Test and Enhance Release 3.0. The DMS program will perform developmental testing and implement enhancements to Release 3.0. $(2^{\text{nd}} 4^{\text{th}} \text{ Otr}, \$1.590\text{M})$
- o Expand Medium Grade Service (MGS). DMS will expand the MGS operational base. MGS is a managed set of Commercial Off-The-Shelf (COTS) e-mail products, that utilize the DOD Medium Assurance Public Key Infrastructure (PKI). As a subset of DMS, MGS represents a set of Internet standards agreed to by government and industry. $(2^{nd} Qtr, \$1.200M)$
- o Implement Automated Message Handling System (AMHS). The DMS AMHS will be implemented and maintained at CINC sites. $(1^{st} 2^{nd} \text{ Qtr}, \$0.650\text{M})$
- o Total \$10.778M

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Exhibi	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Defense Message System (DMS)/P.E. 0303129K					
COST (in millions)	FY00	FY01	FY02		Cost to Complete					Total Cost
Defense Message System/DM01	0	10.778	11.423						Contg	Contg

FY2002 Plan

- o Field Release 3.0. DMS implements and fields system capabilities through a series of coordinated product releases. Release 3.0 provides classified organizational messaging through Top Secret/Special Compartmented Information (SCI). $(1^{st} 2^{nd})$ Otr, \$1.557M)
- o Deliver Release 3.1. Release 3.1 will provide additional enhancements and robustness to organizational messaging. $(1^{st} 2^{nd})$ Otr. $(1^{st} 2^{nd})$ Otr. $(1^{st} 2^{nd})$
- o Release 3.0 Operational Assessment/Test. DMS Release 3.0 will undergo either an Operational Assessment or an Operational Test, in accordance with the approved DMS Revised Capstone Test and Master Plan (TEMP), dtd July 1999. (2nd 3rd Otr, \$1.833M)
- o Expand Medium Grade Service (MGS)/Message Service Convergence. DMS will continue to expand the MGS operational base. The convergence of the current DMS High Grade integration of both Commercial and Government supplied hardware and software products and the Medium Grade implementation of Commercial-off-the-Shelf (COTS) will begin. Studies have concluded that this convergence can be accelerated due to the significant technological advances in commercial encryption/security and messaging service capability. (2nd Qtr, \$2.500M)
- o Start Release 3.2. Initial development of DMS Release 3.2 will begin. $(3^{\rm rd} 4^{\rm th} \, {\rm Qtr}, \, \$.500 {\rm M})$
- o Total \$11.423M

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Exhibi	.t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05						Message Sys	_)/P.E. 0303129K		
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Defense Message System/DM01	0	10.778	11.423						Contg	Contg

B. Program Change Summary:

	FY00	FY01	FY02
Previous Presidents Budget (FY 2001)		$\overline{11.3}40$	$\overline{11.7}64$
Appropriated Value		11.340	
Adjustments to Appropriated Value		562	
Adjustments to Budget Year Since FY 2001 President's Budget			341
Current Budget Submit/President's Budget (FY 2002)	N/A	10.778	11.423
Change Summary Explanation:			

FY 2001 decrease is due to congressional rescission and below threshold reprogramming. FY 2002 adjustments are due to revised fiscal quidance.

C. Other Program Funding Summary:

			FY00	FY01	FY02	Complete
Operation &	Maintenance	, DW	25.922	$1\overline{0.54}0$	8.859	Contg
Procurement	,DW		21.230	16.655	19.062	Contg

D. Acquisition Strategy: DMS Contract, Lockheed Martin Corporation (LMC) provides for the design, development, deployment, implementation and maintenance of DMS. Booz Allen Hamilton (BAH) provides for implementation, tactical deployment, configuration management and logistics support. Unisys/PRC/SRA provide for the development and integration of Medium Grade Messaging Service (MGS). J.G. VanDyke provides site implementation support and site technical assistance. Data Systems Analyst (DSA) provides system and software engineering support, to include implementation engineering, tactical integration, service management system integration support, and engineering support for the DMS Top Secret Collateral implementation.

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Exhibi	t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Defense Message System (DMS)/P.E. 0303129K						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Defense Message System/DM01	0	10.778	11.423						Contg	Contg	
E. Schedule Profile: FY2001: 1st Qtr: O Field Release 2.2/Test Release 2.0 2nd Qtr: O Complete TS/Collateral Inf: O Expand Medium Grade Service 3rd Qtr: O Deliver Release 3.0 Enhance O Release 2.2 Complete Deploy 4th Qtr: O Continue Release 3.0 Develor	rastructue (MGS) ements/Beyment opmental se 3.2 Release d Gateway	are Implement are Implement are Testing 3.0 Operaty Solution	mentation ase 3.1 ational A			ES					
			F	age 5 of	8						

Exhibi	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Defense Message System (DMS)/P.E. 0303129K					
COST (in millions)	FY00	FY01	FY02		Cost to Complete					Total Cost
Defense Message System/DM01	0	10.778	11.423						Contg	Contg

$\frac{\text{FY 2002 (cont)}}{4^{\text{th}} \text{ Qtr:}}$

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o Release 3.0 Organizational Messaging - Complete Fielding

Exhibit R-3 Cost Analys	khibit R-3 Cost Analysis										
APPROPRIATION/BUDGET ACRDT&E, Defense-Wide/05	CTIVITY	PROGRAM ELEMEN' Defense Message		(DMS)/	PE 0303	129K	_	JECT NAME A ense Message			
Cost Category	Contract Method <u>& Type</u>	Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>	
Product Development Systems Engineering and Integration	CPFF, FFP/ Comp	Lockheed Martin Company Manassas, VA	0	2.209	5/01	4.398	5/02	Contg	Contg	6.607	
Systems Integration	CPFF/ Comp	SAIC, Arlington, VA	0	0.650	11/00	0	N/A	Contg	Contg	0.650	
System Engineering	CPAF/ SS	Data Systems Analysts Fairfax, VA	0	1.624	4/01	1.746	4/02	Contg	Contg	3.370	
	FFRDC CPFF/ Comp	MITRE, Arlington, VA Booz, Allen & Hamilton, McLean, VA	0	1.470 1.994	11/00 11/00	1.233 1.719	10/01 11/01	Contg Contg	Contg Contg	2.703 3.713	
	CPFF/ SS	JG Van Dyke, Alexandria, VA	0	0.324	2/01	0.494	1/02	Contg	Contg	0.818	
	CPFF/ Comp	SETA, McClean, VA	0	1.258	1/01	0	N/A	0	1.258	1.258	
Subtotal Product Developme	ent			9.529		9.590					
					7 of 8						

Exhibit R-3 Cost Analys	chibit R-3 Cost Analysis												
APPROPRIATION/BUDGET AGRDT&E, Defense-Wide/05	CTIVITY									PROJECT NAME AND NUMBER Defense Message System/DM01			
Cost Category	Contract Method & Type	Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>			
Fest and Evaluation Developmental Test and Evaluation	MIPR	Joint Interoperability Test Command, Ft Huachuca, AZ	0	0.795	11/00	1.200	10/01	Contg	Contg	1.995			
	CPAF/ SS	Data Systems Analysts Fairfax, VA	0	0.454	4/01	0.375	4/02	Contg	Contg	0.829			
Tactical Testing	MIPR/ ARMY	Executive Agent Tactical Switch Systems	0	0	N/A	0.258	10/01	0	0.258	0.258			
Subtotal Test and Evaluation	n			1.249		1.833							
TOTAL				10.778		11.423							
				Page	8 of 8	ł							

Exhibit R-2, RDT&E Budget Item Justification									DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP)/P.E. 03					303140K		
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost		
Information Systems Security Program/IA01	0	19.780	11.767						Contg	Contg		

A. Mission Description & Budget Item Justification:

The Information Systems Security Program, initially created by Defense Management Review Decision (DMRD) 918 dated September 1992, provides for the protection and defensive operation at the tactical, operational, and strategic levels. The Information Assurance Program assures availability, confidentiality, and reliability of mission data as it is processed and traverses DOD's networks. Joint Vision 2010 states that protecting the capability to conduct information operations is one of the most important challenges in the future. DISA has the responsibility to ensure the Global Information Grid (GIG) contains adequate protection against attack and robust dynamic network capabilities are maintained to allow DOD to move toward a common goal: a joint force - persuasive in peace, decisive in war, and preeminent in any form of conflict. Therefore, the role of the Information Assurance (IA) program is to improve the information superiority posture of the DOD. This program provides the DOD-wide security architecture, technical implementation strategy, and current security operations - proactive, routine, and crisis-response. The RDT&E portion of DISA's ISSP budget focuses predominantly on the security aspects of the Defense Message System (DMS). These funds in PE 0303140K are not duplicative of work being done under PE 0303129K which are shown in a separate R-2 exhibit. In order for DMS to achieve its military functionality, various security improvements were budgeted for and initiated under the Information Systems Security Program. DISA will incorporate the DOD Public Key Infrastructure and state-of-the-art information security products such as Certificate Authority Workstations, High Assurance Guards, and Firewalls. New or improved hardware and software must be prototyped and tested to ensure DMS responds to CINCs'and Services' demands for secure commercial messaging capabilities. Multiple security level technologies, based upon High Assurance Guards, must be incorporated to provide secure interoperability between messaging enclaves of differing security classifications. These DMS security services will continue to be developed, improved, and integrated into the product. In addition to the DMS security work, DISA is jointly funding work with NSA to explore patternless intrusion detection in FY01.

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Exhibi	t R-2, R	DT&E Budg	ion			DATE: Ju	ne 2001			
				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP)/P.E. 0303						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Information Systems Security Program/IA01	0	19.780*	11.767						Contg	Contg

In FY02, DMS will deliver Release 3.0 which will focus on essential Intelligence community requirements and provide automated access controls for compartments, code words, and caveats using ACP 120 implementation of the Common Security Protocol (CSP). DMS will also start Release 3.1 in FY02. This program element is under Budget Activity 5 because it involves the development of major upgrades that increase the performance of existing systems.

* This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2001, funding was realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent Departmental guidance regarding Information Technology budgeting.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibi	.t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: June 2001			
				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP)/P.E. 030							
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Information Systems Security Program/IA01	0	19.780	11.767						Contg	Contg	

FY2001 Plan

- o Field and Enhance Release 2.2. The DMS program will test and field the ISSP security feature enhancements to Release 2.2. DMS implements and fields system capabilities through a series of coordinated product releases. ($1^{st} 4^{th}$ Qtr, \$.919M)
- o Deliver Release 3.0. Release 3.0 provides ISSP security features for classified organizational messaging through Top Secret/Sensitive Compartmented Information (SCI). $(1^{st} 2^{nd})$ Qtr, \$13.929M)
- o Test and Enhance Release 3.0. The DMS program will perform developmental testing and implement ISSP security feature enhancements to Release 3.0. $(2^{\text{nd}} 4^{\text{th}})$ Otr, \$.335M)
- o Expand Medium Grade Service (MGS). DMS will expand the ISSP security features of the MGS operational base. MGS is a managed set of Commercial Off-The-Shelf (COTS) e-mail products, that utilize the DOD Medium Assurance Public Key Infrastructure (PKI). As a subset of the DMS, MGS represents a set of Internet standards agreed to by government and industry. (2nd Qtr, \$2.000M)
- o Start Release 3.1. Initial development of the ISSP security specific features of DMS Release 3.1 will begin. This Release will provide additional enhancements and robustness to organizational messaging. $(3^{rd} 4^{th} Qtr, \$.850M)$
- o Intrusion Detection Systems. Prototype intrusion detection solution for Pacific Air Force (PACAF) $(2^{nd} 4^{th} Qtr, \$.350M)$
- o Effort associated with information security awareness, education and training (3rd 4th Qtr, \$1.397M)
- o Total \$19.780M

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Exhibi	t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05						NOMENCLA on Systems	_	Program (I	SSP)/P.E. 03	303140K
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Information Systems Security Program/IA01	0	19.780	11.767						Contg	Contg

FY2002 Plan

- $\overline{\text{o}}$ Field Release 3.0. DMS implements and fields system capabilities through a series of coordinated product releases. Release 3.0 provides classified organizational messaging through Top Secret/Sensitive Compartmented Information (SCI). (1st 2nd Otr, \$.950M)
- o Deliver Release 3.1. Release 3.1 will provide additional enhancements and robustness to organizational messaging. $(1^{st} 2^{nd})$ Otr. \$6.500M)
- o Security, Test, and Evaluation (ST&E) of DMS Releases. DMS Releases will undergo security tests of ISSP security features in accordance with the approved DMS Revised Capstone Test and Master Plan (TEMP), dtd., July 99. $(2^{nd} 3^{rd})$ Qtr, \$.743M)
- o Expand Medium Grade Service (MGS)/Message Service Convergence. DMS will continue to expand the MGS operational base. The convergence of the current DMS High Grade integration of both Commercial and Government supplied hardware and software products and the Medium Grade implementation of Commercial-off-the-Shelf (COTS) will begin. Studies have concluded that this convergence can be accelerated due to the significant technological advances in commercial encryption/security and messaging service capability. (2nd Qtr, \$2.500M)
- o Start Release 3.2. Initial development of the ISSP security specific features of DMS Release 3.2 will begin. $(3^{rd} 4^{th})$ Otr, \$1.074M)
- o Total \$ 11.767M

Exhibi	t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05						NOMENCLA on Systems	Program (I	cam (ISSP)/P.E. 03031		
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Information Systems Security Program/IA01	0	19.780	11.767						Contg	Contg

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B. Program Change Summary:

	FIUU	FIUL	FIUZ
Previous President's Budget (FY 2001)		18.2 10	$\overline{12.0}16$
Appropriated Value		19.610	
Adjustments to Appropriated Value		.170	
Adjustments to Budget Year Since FY 2001 President's Budget			249
Current Budget Submit/President's Budget (FY 2002)	N/A	19.780	11.767

Change Summary Explanation:

FY 2001 increase is due to congressional adjustments and below threshold reprogramming. FY 2002 adjustments are due to revised fiscal guidance.

C. Other Program Funding Summary:

D. Acquisition Strategy: The DMS Contract, Lockheed Martin Corporation (LMC), for the design and development of DMS; Planning Research Corporation (PRC) for the development and integration of Medium Grade Messaging Service (MGS); NSA for the development of security products and the conduct of ST&E (Security Test & Evaluation); and the Joint Interoperability Test Command (JITC) for planning and conducting operational testing.

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Exhibi	t R-2, R	DT&E Budg	ion			DATE: Ju	ne 2001			
				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP)/P.E. 03						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Information Systems Security Program/IA01	0	19.780	11.767						Contg	Contg

E. <u>Schedule Profile:</u> Field various releases of the DMS product with state-of-the-art security components as shown in the following schedule:

FY2001:

- 1st Qtr
- o Field Release 2.2/Test Release 2.2 Organizational Messaging Enhancements
- o Deliver Release 3.0
- 2nd Otr:
- o Complete TS/Collateral Infrastructure Implementation
- o Expand Medium Grade Service (MGS)
- 3rd Otr:
- o Deliver Release 3.0 Enhancements
- o Release 2.2 Complete Deployment
- o Begin Release 3.1
- 4th Otr:
- o Continue Release 3.0 Developmental Testing
- o Patternless Intrusion Detection prototype and technical report

FY2002:

- 1st Otr:
- o Deliver Release 3.1
- o Begin Development of Release 3.2

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Exhibi	t R-2, R			DATE: Ju	ne 2001					
				R-1 ITEM NOMENCLATURE Information Systems Security Program (ISSP)/P.E. 03						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Information Systems Security Program/IA01	0	19.780	11.767						Contg	Contg

$\frac{\text{FY 2002 (cont)}}{2^{\text{nd}} \text{ Qtr:}}$:

- o Field Release 3.0/Complete Release 3.0 Operational Assessment/Test
- o Begin Development of Allied Gateway Solution
- o Continue Intel and Deployed Tactical Implementation
- 3rd Qtr:
- o Expand Medium Grade Service (MGS)
- o Release 3.0 Organizational Messaging Complete Deployment

Exhibit R-3 Cost Analys	is								D.	ATE: June 2001
APPROPRIATION/BUDGET ACREMITED NOTE: APPROPRIATION NOTE:	TIVITY	PROGRAM ELEMENT Information Syste		curity I	Program	(ISSP)	_	JECT NAME A	IBER curity Program/IA01	
Cost Category	Contract	Performing	Total		FY 01		FY 02			Target
		Activity &	PYs	FY 01	Award	FY 02	Award	Cost To	Total	Value of
	& Type	Location	Cost	Cost	<u>Date</u>	Cost	<u>Date</u>	<u>Complete</u>	Cost	Contract
Product Development Systems Engineering and Integration		Lockheed Martin Company, Manassas, VA	0	12.469	5/01	10.132	5/02	Contg	Contg	22.601
Systems Integration	CPFF/ Comp	SAIC, Arlington, VA	0	0.550	11/00	0.950	2/02	0	1.500	1.500
		CSC, Arlington, VA	0	2.000	2/01	0	N/A	0	2.000	2.000
	CPFF/ Comp	UNISYS, Arlington, VA	0	1.000	4/01	0	N/A	0	1.000	1.000
Patternless Intrusion Detection		Army, Ft Shafter, HI	0	0.057	12/00	0	N/A	0	0.057	0.057
		NSA, Ft Meade, MD	0	0.082	12/00	0	N/A	0	0.082	
		DISA PAC, HI	0	0.041	03/01	0	N/A	0	0.041	0.041
		Naval Post Graduate School, Monterey, CA		0.170	02/01	0	N/A	0	0.170	0.170
Training	TBD	TBD	0	1.397	TBD	0	N/A	0	1.397	1.397
Subtotal Product Developme	nt			17.766		11.082				
<u>Test and Evaluation</u> Developmental/Operational Test and Evaluation		Joint Interoperability Test Command, Ft Huachuca, AZ	0	1.839	10/00	0	N/A	Contg	Contg	1.839
Security Test and Evaluation	MIPR	DISA Joint Interoperability Test Command, Ft Huachuca, AZ	0	0 0.175	N/A 11/00	0.507 0.178	10/01 10/01	0	0.507 0.353	0.507 0.353
Subtotal Test and Evaluation				2.014		0.685				
TOTAL				19.780		11.767				
				Page	8 of 8					

Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	7					NOMENCLA	-	(GCSS)/P.E	C. 0303141K	
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Global Combat Support System/CS01	0	20.834*	16.483						Contg	Contg

A. Mission Description & Budget Item Justification: The Global Combat Support System (GCSS) provides a strategy for achieving information interoperability across combat support functions, and between combat support and C2 functions. The DISA components of GCSS are focused on providing integrated combat support information to improve the CINC/Joint Task Force (JTF) level decision-making process. At this time, GCSS consists of three major components: (1) the Common Operational Picture-Combat Support Enhanced (COP-CSE), which provides operators with map-based visualization capabilities; (2) the GCSS Portal, which permits operators web-based query capabilities; and (3) Combat Support Data Environment (CSDE) which provides a common access mechanism to heterogeneous data sources. In FY 1999 DISA fielded these three components to Pacific Command (PACOM), U.S. Forces, Korea (USFK), Alaska Command (ALCOM), and the Logistics Readiness Center within the National Military Command Center (NMCC). The version fielded to the NMCC included additional capabilities required to support the ongoing Kosovo Operations. All components were tested and received certification before being deployed. Current efforts are focused on delivering enhanced capabilities based upon results from the Foal Eagle 99 Exercise; fielding to Pacific Command (PACOM), Central Command (CENTCOM) and Joint Forces Command (JFCOM); and incorporating the Joint Decision Support Tools developed under the Joint Logistics - Advanced Capabilities Technology Demonstration (JL-ACTD). This program element is under Budget Activity 5 because it involves the development of major upgrades that increase the performance of existing systems.

*This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2001, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent Departmental guidance regarding Information Technology budgeting.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	Z.					NOMENCLA	-	(GCSS)/P.E	C. 0303141K	
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Global Combat Support System/CS01	0	20.834	16.483						Contg	Contg

FY 2001 Plans:

- o Integrate the following capabilities provided by the Transportation Common Operational Picture (TCOP): the ability to access and display information related to site categories in addition to airfields and seaports (e.g. hospitals), the ability to automatically link COP air tracks to missions and possibly Air Tasking Orders (ATOs), and expansion of COP air tracks to include those provided by the FAA's Enhanced Traffic Management System (ETMS) (1st 2nd Otr; \$2,400K)
- o Field COP-CSE, GCSS Portal and CSDE to other designated locations, move to new versions of the Defense Information Infrastucture (DII) Common Operating Environment (COE) to be consistent with the Global Command and Control System (GCCS) client, support exercises/field events like BRIGHT STAR, as directed by the JCS, continue to enhance the COP-CSE and implement new requirements $(2^{nd} 3^{rd})$ Otr; \$1,629K)
- o Add a Mapping capability to GCSS Portal that will allow Portal users to view data about various combat support resources indicating where those actual, physical resources are located and provide the Portal user with a capability similar to that already available to the COP-CSE user $(2^{nd} 3^{rd} Qtr; \$3,789K)$
- o Enhance the GCSS Portal by the integration of Information Dissemination Management (IDM) capabilities that support retrieval of unstructured data, such as text pages, audio, video, imagery $(1^{st} 3^{rd} Qtr; \$3,800K)$
- o Add the capability to access and display three new types of combat support data (Class III: Petroleum, Oil and Lubricants (POL), Class V: Ammunition and Class IX: Repair Parts) $(2^{nd} 3^{rd} Qtr; \$1,400K)$
- o Determine and display the exact location of repair parts specified by either National Stock Number (NSN) or requisition number; the location of ammunition supplies specified by NSN or DOD Identification Code (DODIC); and the location of package and bulk POL products in the theater of operations $(2^{nd} 3^{rd} \text{ Qtr}; \$1,400\text{K})$
- o Enable the user to identify the POL type and quantity as well as POL-related capabilities such as storage facilities ($2^{nd} 3^{rd}$ Qtr; \$1,700K)
- o Replace Joint Operations Planning and Execution System (JOPES), the data source that supplies the Operational Plans provided to GCSS, with the newly designed JOPES 2000 (1^{st} 3^{rd} Qtr; \$1,700K)

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	Z.					NOMENCLA	_	(GCSS)/P.E	C. 0303141K	
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Global Combat Support System/CS01	0	20.834	16.483						Contg	Contg

- o Develop and implement on an incremental basis, the GCSS System Administration and Logging Tool (GSALT), to consolidate account information for GCSS users and provide the mechanisms for securely passing security credentials among the various applications and components of GCSS; it will evolve with the evolving capabilities of the related security architecture in the DII COE and will make use of services provided by other key DII infrastructure components such as the DOD Public Key Infrastructure (PKI) program and the Global Information Grid (GIG) Directory Services (1st 3rd Qtr; \$2,000K)
 - o Develop computer-based and embedded training for users and test GCSS (CINC/JTF) v2.0 (2nd 3rd Qtr; \$1,016K)
 - o Total \$20.834M

FY 2002 Plans:

- o Add a Collaborative Logistics Planning capability to enable planners located in different parts of the world to work together on a common plan for providing logistics support to a planned or ongoing operation, and be able to modify data in logistics planning databases (1^{st} 3^{rd} Qtr; \$2,608K)
- o Evolve the CSDE to a more technically advanced, component-based architecture comprised of Commercial-Off-the-Shelf (COTS) open Applications Program Interface (API) components and services which will allow GCSS to seamlessly connect its data sources and visualization components $(2^{nd} 3^{rd} Qtr; \$2,289K)$
- o Enhance the GCSS Portal capability by incorporating an enhanced personalization service with the GCCS Single Sign-On solution to provide the needed runtime services for loosely coupled application integration and to support targeted information delivery in a secure environment. $(2^{nd} 3^{rd})$ Qtr; \$3,206K)
- o Field new versions of CSDE to additional sites as directed by the Joint Staff, continue migrating to new versions of DII COE, and add new data sources as required to meet CINC priorities (1^{st} 3^{rd} Qtr; \$2,810K)
- o Field enhanced CSDE runtime security services to ensure enforcement of need-to-know and privacy act restrictions within a loosely coupled in-tiered environment while supporting assured, encrypted delivery and transfer of CSDE information. ($2^{nd} 3^{rd}$ Qtr; \$1,640K)
- o Provide users with access to authoritative medical data, such as specific medical supplies, blood, available hospital beds, staff specialties, actual and expected medical activities and medical procedures and other resources available at medical facilities. (1^{st} 3^{rd} Qtr; \$640K)

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	7					NOMENCLA	_	(GCSS)/P.E	C. 0303141K	
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Global Combat Support System/CS01	0	20.834	16.483						Contg	Contg

o Support course of action analysis and planning through the examination of a force from Unit Line Number (ULN), equipment, personnel, and role-based perspectives, to include actual unit/equipment location data from the Global Transportation Network (GTN), and execution and planning information from the Joint Operation Planning and Execution System (JOPES)(1^{st} - 3^{rd} Qtr; \$2,460K)

- o Develop training content for system administrators and testing for v3.0 of GCSS(CINC/JTF)(1st Qtr; \$830K)
- o Total \$16.483M

B. Program Change Summary:	FY00	FY01	FY02
Previous President's Budget (FY 2001)		$2\overline{2.28}7$	$2\overline{0.08}1$
Appropriated Value		22.287	
Adjustments to Appropriated Value		-1.453	
Adjustments to Budget Year Since FY 2001 President's Budget			-3.598
Current Budget Submit/President's Budget (FY 2002)	N/A	20.834	16.483
Change Summary Explanation:			

FY01 decrease is due to congressional rescission and below threshold reprogramming. FY02 adjustments are due to program restructuring.

C. Other Program Funding Summary:

	FY00	FY01	FY02	To Complete
Operation and Maintenance,DW	28.2 88	8.650	12.606	Contg
Procurement,DW	2.236	5.100	1.843	Contg

D. <u>Acquisition Strategy</u>: All RDT&E work will be contracted out or funded by using MIPRs. Product Development: JSE/LOGICON, Enterworks I-CASE, FEDSIM; Management Services: MITRE; Test and Evaluation: JSE/LOGICON, SAIC, MITRE

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Exhib	Exhibit R-2, RDT&E Budget Item Justification										
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Global Combat Support System (GCSS)/P.E. 0303141K						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Global Combat Support System/CS01	0	20.834	16.483						Contg	Contg	

E. Schedule Profile:

FY 2001

1st Qtr

- o Integrate Integrated Dissemination Management (IDM) with GCSS(CINC/JTF)
- o Conduct GCSS(CINC/JTF) v2.0 OT&E in Pacific Command (PACOM) (27 Sep 5 Oct 00)
- o Conduct Security Assessment in PACOM (6-18 Oct 00)

 2^{nd} Qtr

- o Provide integration engineering support to incorporate Joint Total Asset Visibility (JTAV) system
- o Conduct Follow-on T&E in Defense Enterprise Computing Center, Montgomery, (10-26 Jan 01)

3rd Otr

o Start fielding of GCSS(CINC/JTF) v2.0 to CINC sites designated by the Joint Staff

 4^{th} Qtr

- o Complete fielding of GCSS(CINC/JTF) v2.0 to CINC sites designated by the Joint Staff
- o Complete development and testing of GCSS(CINC/JTF) phase 3 for fielding in FY02
- o Provide ACTD tool that will easily integrate with GCSS(CINC/JTF)

FY 2002

1st - 4th Qtr

- o Field phase 3 of GCSS(CINC/JTF) to CINC sites designated by the Joint Staff
- o Provide integration engineering support to the Army, AF, Navy, Marine Corps

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Exhibit R-	3 Cost	Analysis									DATE: June 2001
APPROPRIAT: RDT&E, Defer		GET ACTIVITY /05	PROGRAM Global Co PE 030314	mbat Su		System	(GCSS)		PROJECT N		NUMBER rt System/CS01
Cost Category Product Development	Method & Type C/CPFF MIPR C/CPFF C/CPFF	Performing Activity & Location LOGICON/Arlington , V UNISYS/Falls Church, FGM/Sterling, VA SB TBD ENTERWORKS/Sterlir I-CASE/Gunter AFB, M FEDSIM/Bethesa, MD NRL, Washington, DC	VA ng, VA	FY 01 <u>Cost</u> 4.700 .943 4.700 .200 2.050 .500 1.400 .250	FY 01 Award <u>Date</u> 03/01 07/01 03/01 10/00 02/01 12/00 10/00	FY 02 <u>Cost</u> 3.402 .650 4.500 .250 1.250 .500 1.000 .250	FY 02 Award Date 03/02 07/02 03/02 10/01 02/02 12/01 10/01	Cost To Complete Contg	Total Cost Contg	Target Value of <u>Contract</u> 8.102 1.593 9.200 0.450 3.300 1.000 2.400 0.500	
Management Services	FFRDC C/CPFF	MITRE/Vienna, VA TBD		1.075	10/00	1.000	10/01	Contg	Contg	1.175	
Test and Evaluation	C/CPFF C/CPFF FFRDC MIPR PR PR PR	LOGICON/Arlington, V SAIC/Falls Church, VA MITRE/Vienna, VA JITC/Ft Huachuca, AZ CSC/Falls Church, VA NRL/Washington, DC MITSS/Langston, OK		.900 .400 1.400 .134 .300 .302 .280	03/01 02/01 10/00 03/01 04/01 04/01 08/01	.500 .400 1.000 .150 .200 .200	03/02 02/02 10/01 03/02 04/02 04/02 08/01	Contg Contg Contg Contg Contg Contg Contg	Contg Contg Contg Contg Contg Contg Contg	1.400 0.800 2.400 0.284 0.500 0.502 0.560	
Support Costs	MIPR	DECC-D, Montgomery	, AL	1.300	10/00	0.951	10/01	Contg	Contg	2.251	
Total				20.834		16.483					
						Page	6 of 6				

Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	7					NOMENCLA C Commerce	_	340K		
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703*	25.519						Contg	Contg

A. Mission Description and Budget Item Justification: In November 1997, the Deputy Secretary of Defense published the Defense Reform Initiative (DRI) which identified the need to promulgate electronic business operations throughout the DOD. To foster the increased application of Electronic Business/Electronic Commerce (EB/EC) across the Department, Defense Reform Initiative Directive (DRID) #43 was issued to establish the overall direction of the DOD Joint Electronic Commerce Program initiative as well as formally establish the Joint Electronic Commerce Program Office (JECPO). Furthermore, the DOD Chief Information Officer (CIO) has developed a cohesive set of guiding principles, goals, objectives, and strategies to promote EB/EC as a complementary business process throughout the functional areas of the Department. The DOD EB/EC strategic guidance and vision can be found in the DOD EB/EC Strategic Plan. Its sets forth the summary level direction the Department must take to implement EB/EC in support of its global mission. Since May 1998, JECPO has focused its efforts on EB/EC tools and applications that exhibit joint interoperability and support cross-functional business processes that have been re-engineered to exploit EC technologies. Current programs have been categorized into the work areas of applications and engineering. This program element is under Budget Activity 5 because it involves the development of major upgrades that increase the performance of existing systems.

* This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2001, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent Departmental guidance regarding Information Technology budgeting.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibi	Exhibit R-2, RDT&E Budget Item Justific								ne 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg	

FY 2001 Plans:

Central Contractor Registration (CCR) - The CCR is a web-based system that is the primary repository for vendor data required for conducting business with the DOD. The CCR database currently consists of procurement and financial information as well as trading partner data required to do business electronically with the government. The purposes of the database are to allow the DOD to more efficiently comply with the Debt Collection Improvement Act of 1996; to simplify and streamline procurement by reducing duplicate requirements and processes; and to increase visibility of vendor sources for specific goods and services. Contractors are only required to register in the database one time with annual renewals. (1st Otr - 4th Otr; \$3.589M).

DOD Business Opportunities (DODBusOpps) - The DOD Business Opportunities Model is a web-based system, which provides a single search mechanism for vendors to review DOD on-line solicitations. Each of the Defense Services/Agencies provides links through their own web-based systems and to DOD Business Opportunities. (1st Qtr - 4th Qtr; \$2.755M).

Electronic Document Access (EDA) - EDA is a web-based system that provides on-line storage and retrieval of post award contracts, contract modifications, personal property, freight Government Bills of Lading (GBLs), and vouchers. Documents are stored in a compressed text format. The combined use of this format with Internet technology provides a mechanism to electronically store and retrieve large volumes of information across the existing communication networks. EDA capitalizes on commercial tools that are widely used today. EDA will increase its customer base from DFAS recipients of contracts to include Industry and will pioneer the use of Public Key Infrastructure (PKI) for information assurance. Benefits include the reduction of unmatched disbursements, reduced paper consumption, and increased convenience to members of the user community. (1st Otr - 4th Otr; \$2.084M).

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

DOD Electronic Mall (E-Mall) - The DOD E-Mall provides electronic buying capabilities leveraging the work done for commodities by DLA. The DOD E-Mall is a single point of entry system that can search, locate, compare and order material based upon quality, price, and availability. It provides a single point of entry and search capability for all Internet-based DOD electronic catalogs. This enables customers to buy both products and services. The DOD E-Mall is being constructed with a commodities corridor, an information technology corridor, and a services/construction corridor. The Military Services and Defense Agencies are fielding "stores" within these corridors. Users can search across the E-Mall system and order from the following sources: DLA Inventory Control Point managed commodity items and Defense Reutilization and Marketing Office reutilization items, Defense Supply Center Philadelphia's ASCOT electronic catalog for clothing and textile items, DLA's E-CAT electronic catalog of commercial part numbered items, Navy's ITEC Direct electronic catalog of IT hardware and software items, Army Tank and Automotive Command, Inventory Control Point (ICP) long term contracts for photographic and lighting supplies, food services, and other mechanical items. In addition to providing one-stop visibility for ordering from all DOD electronic catalogs, the E-Mall will provide one stop visibility of the status of orders. The E-Mall provides the benefits of reduced logistics response time and improved visibility of both government and commercial sources of supply, as well as facilitating the use of the Government purchase card. (1st Qtr - 4th Qtr; \$2.465M).

Wide Area Workflow (WAWF) - Wide Area Workflow (WAWF) is a web-based system designed to eliminate paper from several of the processes in the contracting and contract pay lifecycle. Initial implementation addresses receipt/acceptance and invoice/payment. Capabilities will be added to address Purchase Request/Funding Document and Contract Closeout processes. The WAWF-Receipt and Acceptance prototype provides capabilities for vendors to submit invoices and receipt/acceptance documents using interactive web-based forms or File Transfer Protocol data directly from their internal accounting systems. Government inspection/acceptance capabilities are provided via the web and all documents are accessible to authorized users in a virtual contract payment folder. During functional proof of concept, WAWF is prototyping several commercial tool sets to assess capabilities for supporting functional and technical requirements.

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Exhibi	t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

The WAWF-Contract Closeout segment includes all contracts and associated documents required for contract closeout, thereby providing a multitude of people/organizations the capability to accomplish their part of the closeout via access to all documents in a single location. Benefits include support for expeditious processing of invoices/receipts and reduction of unmatched disbursements since all documentation required for payment is easily accessible.

(1st Otr - 4th Otr; \$4.303M).

Past Performance Automated Information System (PPAIS) - Enhancements provide the tools for sharing and managing past performance information across DOD, to include enhancements identified by the End to End Process Modeling effort, the evolving EC Architecture, interface improvements with related systems, and user defined changes. This includes a query capability for authorized users into data collection by report card systems, including PPAIS itself, a collection capability for those activities which do not have access to an existing collection system, and a performance tracking system drawing on a variety of data sources. (1st Qtr - 4th Qtr; \$0.475M).

DOD Electronic Business Exchange (DEBX) - Enhancement of the DEBX to support the transportation of Electronic Data Interchange (EDI) transactions. The DEBX provides routing, archiving, translation, DataMart/DataWarehouse and other value added services to facilitate the paperless exchange between government contract-writing, accounting, disbursing systems, and commercial trading partners. DEBX also supports business domains outside the procurement arena to include defense travel, transportation, court-ordered garnishment of wages, EMALL, WAWF, EDA, BusOps, CCR, and Purchase Card initiatives. (1^{st} Qtr - 4^{th} Qtr; \$2.518M).

Exhibi	.t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

EC Integration Services - Provides comprehensive electronic commerce systems and security engineering support for the Electronic Commerce systems. This effort provides support for identification, analysis, integration and development of electronic commerce on-line systems and facilities in a way that maximizes technical integration with the Defense Information Infrastructure (DII) and seeks maximum operational and cost saving efficiencies in DOD electronic commerce. (1^{st} Qtr - 4^{th} Qtr; \$1.331M).

System/Program Testing and Analysis - The JECPO Electronic Commerce Infrastructure consists of multiple systems developed for multiple organizations by multiple vendors. These individual systems are integrated into the Electronic Commerce Infrastructure. The Joint Interoperability Test Command (JITC) supports the Electronic Commerce Processing Node, Electronic Document Access, Central Contractor Registration, and Electronic Commerce Interoperability Process by testing the Value Added Network, the DOD/Federal Gateway, and the Trading Partner EC readiness. (1st Qtr - 4th Qtr; \$1.627M).

Product Data Markup Language (PDML)- PDML is a vocabulary of the extensible Markup Language (XML) for the purpose of achieving product data interoperability, product data management system integration, and the integration of contractor data repositories with DOD's legacy system - JEDMICS. Modify PDML schemas (reference model and application transaction sets) as required for widespread use in the defense industrial base. Also, working with acquisition Integrated Digital Environment (IDE) and logistics oversight groups to conduct technology seminars to encourage the use of Electronic Logistics Interoperability Treading Exchange (ELITE) in legacy weapon system logistic support. (1st Qtr - 4th Qtr; \$0.665M).

Electronic Portal Access System (EPASS) - EPASS is to simplify end user access to the various eBusiness applications that are currently available in a stand-alone fashion. Under the EPASS concept, users will execute a single sign-on to an infrastructure that provides a single point of entry, authentication, and authorization function. The goal is to ultimately provide a capability that will save time and reduce cost for other applications and to provide a framework for the future. (1st Qtr - 4^{th} Qtr; \$0.760M).

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

Defense Reform Initiative Directive #48 (DRID #48) - This effort is to replace DOD-unique logistics data standards with American National Standards Institute (ANSI) Accredited Standards Committee (ASC) X12 standards as a stepping-stone to move the Department's transactional-based logistics business processes towards the use of international open data interchange standards. This also includes the design and development of a Web-based Supply Discrepancy Report (SDR) process, Electronic Commerce Resource Center (ECRC) development, and the provision of ANSI X12/Defense Logistics Management System (DLMS) training for participants. (1st Qtr - 4th Qtr; \$1.235M).

Electronic Commerce/Electronic Data Interchange (EC/EDI) Standards Program - EC/EDI is to facilitate development, maintenance, configuration management, publishing, and distribution of Implementation Conventions (IC's) and Guidelines necessary for DOD Electronic Commerce using Electronic Data Interchange. This effort ensures that all EC/EDI used by DOD and other Federal entities comply with national and international published standards and business practices. (1st Otr - 4^{th} Otr; \$0.665M).

Architecture Analysis and Recommendations – This effort assists in the evaluation and integration of commercial-off-the-shelf (COTS) tools to replace custom Government-developed EC applications; it defines, evaluates, and assists in incorporating EC security solutions commensurate with defined security objectives; and applies enterprise application integration techniques and tools toward the goal of achieving a fully integrated DOD EB/EC infrastructure. (1 $^{\rm st}$ Qtr - $4^{\rm th}$ Qtr; \$1.640M).

Certification and Accreditation - In accordance with the Defense Information Technology Security Certification and Accreditation Process (DITSCAP), each application requires a current System Security Authorization Agreement (SSAA) and Security Test and Evaluation (ST&E). The SSAA describes the application, operational and communication environments, threats, and appropriate security information. Once the SSAA has been agreed upon by key stakeholders the application is tested (i.e., ST&E) to certify the compatibility of the application in its computing environment. (3rd Qtr - 4 Qtr; \$0.400)

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Exhibi	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

EB Architecture - Electronic Business/Electronic Commerce (EB/EC) Architecture tool documents the elements of a comprehensive functional and technical process architecture to systematically identify and promote opportunities for expansion of EB/EC capabilities across DOD. This goal is to identify and oversee implementation of EB and Electronic Document Interchange integration. It will become the roadmap for moving EB/EC to a fully automated, interactive, and seamless flow of information supporting Joint Vision 2020 and the warfighter. (2nd Qtr - 4th Qtr; \$0.191)

Total \$26.703M

FY 2002 Plans:

Central Contractor Registration - Anticipated milestone forecasts participants expanding to 310,000 Federal registrants, on-line vendor data validation, and integration of procurement databases to identify the number of government procurement users receiving data, databases replaced, and the number of new applications providing interface utility. This effort provides continued support to DOD by collecting vendor data (specifically, electronic funds transfer data) in order to comply with the Debt Collection Improvement Act (DCIA), as well as vendor identification and socio-economic data provided to the contracting, reporting and finance functional areas. Mission includes providing value added capabilities for accessing and using the vendor data collected for the users it supports. (1st Qtr -4th Qtr; \$3.395M).

DOD Business Opportunities - Integrate over 900 DOD sites with the Government-wide Point of Entry (GPE)/FedBizOpps, provide on-line response submission enhancements; thereby increasing electronic commerce and paperless operations and providing technical data distribution through DOD's Technical Data Solutions (TEDS). (2nd Qtr - 4th Qtr; \$2.617M).

Electronic Document Access - Offer the DOD the opportunity to store and retrieve contract documents, Government Bills of Lading (GBL), vouchers and other document types electronically. This reduces the need to print, mail, file, and manage paper. (1st Qtr - 4^{th} Qtr; \$1.980M).

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Exhibi	Exhibit R-2, RDT&E Budget Item Justification									DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K							
COST (in millions) FY00 FY01 FY02									Cost to Complete	Total Cost			
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg			

DOD Electronic Mall - Permit users to establish "one stop" single registration via the Internet whereby orders can be placed against a wide range of supply vehicles which allow the use of Government Purchase Cards, comparison of prices and deliveries and choose what best fits the need, select the source desired, obtain a full range of contract administration/support services, and obtain status of orders placed. (2nd Qtr - 4th Qtr; \$2.342M).

Wide Area Workflow - Continue development and maintenance of the WAWF-Receipts and Acceptance. The EC/EDI community has strongly embraced the creation of standardized data type definitions and corresponding tools. Expand WAWF to include all contracts and documents, including a contract closeout check, required for contract closeout thereby providing organizations the ability to accomplish their part of the closeout process using documents in one place. Perform integration activities to ensure EC applications are not developed in a stove-pipe fashion. (1st Qtr - 4th Qtr; \$4.094M).

Past Performance Automated Information System - Maintain existing DoD data warehouse, retrieval, and collection system. Provide operations, maintenance, and support services. Provide program and configuration management, and implement approved user requested enhancements. Implement and fully deploy mechanism for collection and use of passive data across all components. Fully integrate passive and report card contract data with the procurement shared data warehouse(s). Implement security improvements. (3rd Qtr - 4th Qtr; \$0.455M).

DOD Electronic Business Exchange - Provide routing, archiving, translation, DataMarts/DataWarehousing and other value added services to facilitate the paperless exchange between government contract-writing, accounting and distribution systems and commercial trading partners. (1^{st} Qtr - 4^{th} Qtr; \$2.393M).

EC Integration Services - Provide comprehensive integrated Electronic Commerce systems engineering support for the DoD Electronic Commerce systems, i.e., support for identification, analysis, integration and development of electronic commerce programs in a way that maximizes technical integration with the DII and seeks the maximum operational and cost saving efficiencies available to DoD electronic commerce. (1st Qtr - 4th Qtr; \$1.271M).

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Exhibi	lt R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

System/Program Testing and Analysis - The JECPO Electronic Commerce Infrastructure consists of multiple systems developed for multiple organizations by multiple vendors. These individual systems are integrated into the Electronic Commerce Infrastructure. The Joint Interoperability Test Command (JITC) supports the Electronic Business Exchange (DEBX), Electronic Document Access, Central Contractor Registration, and Electronic Commerce Interoperability Process by testing the Value Added Network, the DOD/Federal Gateway, Trading Partner EC readiness, Wide Area Work Flow (WAWF), DOD Business Opportunities, DOD EMALL, and the Electronic Portal Access System. (1st Qtr - 4th Qtr; \$1.593M).

Product Data Markup Language (PDML) - Establish a performance baseline for government and industry trading exchange operations in the DOD weapon system acquisition and logistics support environment. Using ELITE and existing Integrated Digital Environment (IDE) as source of requirements, formally describe the data exchange requirements in qualitative and quantitative terms. $(2^{nd} \text{ Qtr} - 4^{th} \text{ Qtr}; \$0.635M)$

Electronic Portal Access System (EPASS) - Provides infrastructure services to other DOD eBusiness applications. The core services include Web-based user authentication, authorization, profile maintenance, and can protect user access for both applications and portals. The project utilizes a high mixture of COTS to GOTS software in accomplishing its goals. (2nd Qtr - 4th Qtr; \$0.725M)

DRID #48 - Evaluate existing and new technical business processes, develop and integrate standards, business rules, and implementation conventions and supplements. Research and identify the best commercial and international operational methods (uniform policies, procedures, time standards, transactions, and data management) available to meet DOD's Joint Vision (JV) 2010/2020 war-fighting requirements. (2nd Qtr - 4th Qtr; \$1.176M)

Electronic Commerce/Electronic Data Interchange (EC/EDI) - Promote EC/EDI standards that comply with national practices that are to be used by Federal and DOD entities, and to seek consistency between the technical view of the EB/EC Architecture and the Joint Technical Architecture. (2nd Qtr - 4th Qtr; \$0.635M)

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Exhibit R-2, RDT&E Budget Item Justification								DATE: Ju	une 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05						NOMENCLA		40K			
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg	

Architecture Analysis and Recommendations - Architecture planning, design, and development. Study and analysis of the DOD CCR data base design. Research, design, and develop EPASS security concept and operations. (1st Qtr - 4th Qtr; \$1.640M)

Certification and Accreditation - Continue certification review process and system accreditation testing for new applications and upgrades. Conduct System Security Authorization Agreement and Security Test & Evaluation reviews of documentation to determine validity for existing certificates and initiate appropriate test measures to ensure compliance. (3rd Qtr - 4th Qtr; \$0.383M)

EB Architecture - Develop and maintain the EB/EC Architecture reflecting improved, reengineered and integrated business processes, and assist OSD and DOD components in the development of consistent and integrated EB/EC architectures. $(1^{st} Qtr - 4^{th} Qtr; \$0.185M)$

Total \$25.519M

B. Program Change Summary	FY00	FY01	FY02
Previous President's Budget (FY 2001)		28.094	$2\overline{5.78}1$
Appropriated Value		28.094	
Adjustments to Appropriated Value		-1.391	
Adjustments to Budget Year since FY 2001 Presidents Budget			-0.262
Current Budget Submit/President's Budget (FY 2002)	N/A	26.703	25.519
Change Summary Explanation:			

FY 2001 decrease is due to congressional rescission and below threshold reprogramming.

FY 2002 changes are due to revised fiscal guidance.

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Exhib:	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					R-1 ITEM NOMENCLATURE Electronic Commerce/ PE 0305840K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Electronic Commerce/EC01	0	26.703	25.519						Contg	Contg

C. Other Program Funding Summary:

 Special operation and Maintenance:
 FY00 46.130 15.754 14.887

 Procurement:
 3.298 3.674 3.673

D. <u>Acquisition Strategy</u> - The mission of JECPO is to accelerate the application of Electronic Business Practices and Associated Information Technologies to improve DoD acquisition processes, support life-cycle sustainment and other departmental business operations. JECPO is developing and maintaining Web-based applications to support the paperless contracting life cycle from requirements generation through contract closeout. These include Central Contractor Registration, Wide Area Workflow, Past Performance Automated Information System, Electronic Document Access, Emall, and Business Opportunities. JECPO is developing a DoD EC Architecture. The architecture's operational, systems, and technical views are being vetted throughout the Department through the Architecture Coordination Council in the DoD CIO. JECPO is addressing EC Integration Services by using public key infrastructure to facilitate single sign on capabilities, and by data integration among JECPO applications. The projected Common Business Environment, made up of applications and infrastructure, will leverage the DII Common Operating Environment (COE).

E. Schedule Profile

FY 2001

1st Otr:

- DII COE compliant software received
- Receive complete software documentation for Central Contractor Registration (CCR) software components
- Receive installation procedures

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Exhib	it R-2, R	RDT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05						M NOMENCLA ic Commerce	-	0305840K				
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost		
Electronic Commerce/EC01	0	26.703*	25.519						Contg	Contg		

- Receive WAWF user's manual
- Receive software test plan and test cases
- Receive DoD Electronic Business Exchange (DEBX) software (DII COE segments)
- Receive translator maps and documentation for systems connected to DEBX
- Ongoing research of EC/EB education material
- Development/maintenance of the CCR website and database
- Maintain Bus Opps web capability/applications/user interface
- Finalize PDML Repository/Registry approach
- Development of business rules, procedures, and implementation connections/supplements

2nd Otr:

- Continue partnerships with Services and Agencies.
- Replace DOD unique proprietary information exchange standards with commercial technologies
- Receive development and expansion of BUSOPPS website
- Update and promulgate technical review committee commercial EDI implementation responsibilities

3rd Otr:

- Continue DoD-wide execution of the Corporate Implementation Plan
- Migration of corporate level infrastructure and services to ASC X12
- Continue development of policy and procedures for centralized management and control of DOD logistics data
- Provide performance measures as required by Government Performance Act of 1996

4th Otr:

- Prepare and deliver training on the passive system to DOD contracting activities
- Development of EDA applications
- Provide operational support to the DOD data administration program and Defense Logistics Management Standards Office (DLMSO) operational area

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Exhibi	it R-2, R	DT&E Budg	et Item J	ustificat	ion		DATE: Ju	ne 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05						NOMENCLA c Commerce	340K				
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost		
Electronic Commerce/EC01	0	26.703*	25.519					Contg	Contg		

- Develop templates and provide conversion support
- Receive engineering guidance on the strategic direction in the evolution to the EC architecture
- Develop implementation plan and charter for End-to-End process model
- Develop performance measures and customer survey instruments
- Assist in development of common user support requirements

FY2002

$\frac{1}{1}$ - 4th Otr

- Continue corporate level configuration management support
- Increase CCR functionality
- Efforts to support single face initiative to all DOD vendors
- Continue improvement of the acquisition automation process
- Contractor integration support
- Integrating the use of COTS tools
- Analysis of engineering issues and oversight of their resolution
- Coordinating the migration to commercial standards
- Development of business rules, procedures, and implementation connections/supplements
- Create a new COTS-based component in the EB/EC infrastructure for authentication, authorization, and registration
- Continous updates to metrics
- Provide a management tool and roadmap for DOD eBusiness initiatives
- Assist in development of new and revised management process business rules

Page 13 of 15

Exhibit R-3 Cost Analys	sis								DA	TE: June 2001	
APPROPRIATION/BUDGET ACROT&E, Defense-Wide/05	CTIVITY	PROGRAM ELEMEN Electronic Comme		030584	0K		_	PROJECT NAME AND NUMBER Electronic Commerce/EC01			
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award Date		Total Cost	Target Value of Contract	
Applications Central Contractor Registration	MIPR	EDS/DLIS/PWC	0	3.589	10/00	3.395	10/01	Contg	Contg	6.984	
DOD Business Opportunities	MIPR	Army/Navy/AF/DISA/DLA	0	2.755	01/01	2.617	01/02	Contg	Contg	5.372	
Product Data Markup Language	TBD	TBD	0	0.665	TBD	0.635	10/01	Contg	Contg	1.300	
EPASS	TBD	TBD	0	0.760	TBD	0.725	02/02	Contg	Contg	1.485	
Wide Area Workflow-RA Wide Area Workflow-INT Wide Area Workflow-Training	MIPR MIPR TBD	EDS EDS TBD	0 0 0	2.400 1.403 0.500	02/01 02/01 TBD	2.281 1.335 0.478	02/02 02/02 10/01	Contg	Contg Contg Contg	4.681 2.738 0.978	
Department of Defense Past Performance Automated Information System	MIPR	Navy	0	0.475	10/00	0.455	10/01	Contg	Contg	0.930	
DOD EMALL	MIPR/PR	Raytheon/Dell/ Excalibur/Red River	0	2.465	05/01	2.342	05/02	Contg	Contg	4.807	
Electronic Document Access	MIPR	EDS/DAPS	0	2.084	10/00	1.980	10/01	Contg	Contg	4.064	
DOD Electronic Business Exchange	PR	INRI	0	2.518	10/00	2.393	10/01	Contg	Contg	4.911	
DRID #48	PR	LMI/Pinkerton/Amerid	0	1.235	03/01	1.176	03/02	Contg	Contg	2.411	
				Page	e 14 of 15						

Exhibit R-3 Cost Analys	bit R-3 Cost Analysis									
APPROPRIATION/BUDGET ACREMENT ROTAL ACREMENT ACR	TIVITY									BER
Cost Category	Contract Method & Type	Performing Activity & Location	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>
Electronic Commerce/Electronic Data	PR	LMI/PCCI/Amerind	0	0.665	10/00	0.635	10/01	Contg	Contg	1.300
Next Generation	PR	Anvicon	0	1.331	10/00	1.271	10/01	Contg	Contg	2.602
MITRE System Engineering	MIPR	MITRE	0	1.640	10/00	1.640	10/01	Contg	Contg	3.280
JITC	MIPR	JITC	0	1.627	10/00	1.593	10/01	Contg	Contg	3.220
Security Documentation	MIPR	TBD	0	0.400	TBD	0.383	03/02	Contg	Contg	0.783
EB Architecture	PR	TBD	0	<u>0.191</u>	TBD	0.185	03/02	Contg	Contg	0.376
TOTAL				26.703		25.519				
				Page	e 15 of 15					

Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	?				Advanced	NOMENCLA Information	n Technolo	gy Service	es Joint Prog	gram Office
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254						Contg	Contg

A. <u>Mission Description & Budget Item Justification</u>: The Advanced Information Technology Services Joint Program Office (AITS-JPO), facilitates the transition of DARPA's and other agencies' substantial information systems technology research into DISA's operational support of the warfighter. The AITS-JPO, among other functions: a) provides advanced technology demonstrations and collaboration capabilities for R&D and Battle Lab communities; b) engineers and reinforces components for leave-behind and transition into the Global Information Grid (GIG)/Defense Information Infrastructure (DII), including the Global Command and Control System (GCCS) and Global Combat Support System (GCSS); c) augments transitioning products with improved security, scalability, and GIG/DII compliance; and d) provides advanced, hardened capabilities (Leading Edge Services) to select operational beta test sites. As a result, this program element is under Budget Activity 5. Leading Edge Services are information transport and value added services not available from the DII and for which customers are willing to assume some of the risk associated with development and initial deployment. These services include information processing, storage, and retrieval; communications (voice, data, video, multimedia); security technology and application in command, control, and intelligence; and combat support for the worldwide DOD communities.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

FY 2000 Accomplishments:

- o Provided initial DII/COE-compliant capability for distributed Joint Task Force and CINC Crisis Action planning, deployment/employment visualization, and analysis interacting between GCCS and modeling and simulation sites (2^{nd} Qtr 3^{rd} Qtr; \$2,629K).
 - o Transitioned Joint Logistics Advanced Concept Technology Demonstration (ACTD) Joint Decision Support Toolkit into Page 1 of 8

Exhib:	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: J	une 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	7				Advanced	NOMENCLA Informatio)/PE 06047	n Technolo	ogy Service	s Joint Prog	ram Office
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254						Contg	Contg

GCSS and provided augmentation to GCSS mediated data services and visualization (including Common Operational Picture) to support them $(2^{nd} Qtr - 4^{th} Qtr; \$2,233K)$.

- o Demonstrated integration of the U.S. Imagery and Geospatial Architecture into Joint Warfighter DII COE systems using advanced software data and video object services (2^{nd} Qtr 4^{th} Qtr; \$2,229K).
- o Provided a collaborative virtual workspace capability for Joint Planning, hosted on the DII COE and based on DARPA and other emerging tools (2^{nd} Qtr 4^{th} Qtr; \$2,246K).
- o Continued transition of Joint Continuous Strike Environment (JCSE) ACTD Joint Targeting Decision Tools to speed up response times to critical mobile targets (2nd Qtr 4th Qtr; \$182K).
- o Provided an initial capability for use by GCCS of Information Dissemination Management (IDM) services. (2^{nd} Qtr 3^{rd} Qtr; \$397K).
- o Developed and demonstrated advanced infrastructure and information assurance services to support a secure, adaptive Joint Force Information Environment at the Joint Commands and at the Regional Computer Incident Response Teams $(2^{nd} Qtr 3^{rd} Qtr; \$3,110K)$.
- o Total \$13.026M

FY 2001 Plans:

- o Initial transition to GCCS of execution monitoring and continuous real-time assessment aids for Joint Task Forces using products from the Adaptive Course of Action (ACOA) ACTD, and other relevant DARPA and Service technology (2nd Qtr 4th Qtr; \$2,556K).
- o Incorporate enhanced Battlespace Awareness tools into the Integrated Intelligence and Imagery Database (I3DB) component of GCCS and other C2 systems (2^{nd} Qtr 4^{th} Qtr; \$1,694K).
- o Integrate knowledge-based product access techniques IDM services in order to disseminate relevant, mission-critical information to tactical forces. Focus on geospatial, intelligence, plans information. (2^{nd} Qtr 3^{rd} Qtr; \$828K).

Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion		DATE: 3	June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	Ţ.				Advanced	-		es Joint Prog	ram
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254					Contg	Contg

- o Complete integration of Joint Logistics products and other DARPA combat support tools into GCSS for support to Joint Force logisticians (2^{nd} Qtr 4^{th} Qtr; \$828K).
- o Provide a capability for extensive functional integration between the Joint Force operational planning functions of the GCCS and the development/assessment of the combat support plan (2^{nd} Qtr 4^{th} Qtr; \$1,727K).
- o Transition an upgraded distributed decision-making toolkit and advanced shared applications that increase interaction between C4I systems, combat support systems and modeling and simulation centers (2nd Qtr 4th Qtr; \$1.694K).
- o Demonstrate a cost-effective capability to support dynamic bandwidth management within the global networks to support priority dissemination of time critical information and information release to coalition forces (2^{nd} Qtr 4^{th} Qtr; \$1,088K).
- o Provide enhanced GCCS and GCSS applications that take advantage of dynamic bandwidth allocation on limited networks by coupling to an optimized information dissemination and network interface. $(2^{nd} Qtr 4^{th} Qtr; \$1,693K)$.
- o Initial transition of products from the DARPA Information Assurance (IA) program and other IA technology into Global Information Grid infrastructure, including intrusion detection and guards (2^{nd} Qtr 4^{th} Qtr; \$825K).
- o Total \$12.933M

FY 2002 Plans:

- o Complete transition of Joint Force Planning and Execution Tools from the Adaptive Courses of Action ACTD to GCCS (2nd Otr 3rd Otr ; \$2,836K).
- o Continue development and integration of advanced Battlespace Awareness tools into GCCS (4th Qtr; \$1,844K).
- o Final transition of Joint Logistics ACTD decision support tools to GCCS (2nd Qtr 3rd Qtr ; \$2,837K).

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion		DATE: 3	June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					Advanced			es Joint Prog	ram
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254					Contg	Contg

- o Demonstrate secure shared applications environment (1st Qtr 3rd Qtr ; \$1,844K).
- o Demonstrate prototype information management enterprise that provides monitoring and policy management of networks and information management (2^{nd} Qtr 4^{th} Qtr ; \$3,440K).
- o Demonstrate initial capability for active network intrusion response (2nd Qtr 4th Qtr; \$1,453K).
- o Total \$14.254M

B. Program Change Summary	FY00	FY01	FY02
Previous President's Budget (FY 2001)	$\overline{14.370}$	14.6 85	$\overline{14.5}73$
Appropriated Value	15.172	14.685	
Adjustments to Appropriated Value	-2.146	-1.752	
Adjustments to Budget Year Since FY 2001 President's Budget			319
Current Budget Submit/President's Budget (FY 2002)	13.026	12.933	14.254
Change Summary Explanation:			

- FY00 adjustments due to below threshold reprogramming.
- FY01 reduction due to congressional rescission and below threshold reprogramming.
- FY02 adjustments are due to revised fiscal quidance.

C. Other Program Funding Summary:

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: J	Tune 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05	Y				Advanced	NOMENCLA Informatio	n Technolo		s Joint Prog	ram
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254						Contg	Contg

D. Acquisition Strategy: MITRE, Reston, VA; Houston Associates, Inc., SAIC, Arlington, VA and SSC, San Diego

E. Schedule Profile:

FY 2000

1st Otr

o Continued transition of DARPA Decision Tools for Advanced Joint Planning and expanded transitions to include integration of technology from other Services and Agencies (NIMA Target Analysis Aids, Navy Visualization Tools, DTRA Secure Collaboration).

2nd Qtr

- o Distributed planning/analysis and force deployment visualization capability to GCCS.
- o Initial Logistics Joint Decision Support tools COE-compliant with and operating with GCCS/GCSS.
- o Distributed decision-making toolkit for DII COE.

3rd Qtr

- o Information Dissemination Management services into GCCS, DII COE and DISN.
- o Continued Battle Lab experiments with advance information infrastructure and INFOSEC components.

4th Qtr

- o Completed transition of Battlefield Awareness Data Dissemination (BADD) ACTD components to GCCS imagery and intelligent database segments, and Geospatial information systems.
- o Initial integration of Joint Logistics ACTD tools into GCCS/GCSS.
- o Continued Federated Battle Lab experiments with advanced information infrastructure and INFOSEC components.

Page 5 of 8

Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion		DATE: J	une 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					Advanced	_		s Joint Prog	ram
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254					Contg	Contg

FY 2001

1st Otr

- o Continue integration and transition of components of DARPA's, Services' and Agencies' technology programs into GIG and DII aligned with GIG/DII software releases.
- o Continue to develop joint and coalition interoperability capabilities in accordance with Joint Staff priorities, available technologies, and GIG Strategic Plans.

2nd Qtr

- o Demonstrate GCCS integrated plan execution monitoring capability.
- o Integrated Intelligence and Imagery Database (I3DB) components and product access via IDM services.
- o Continue sustained support of leading edge deployed capabilities until they are fully transitioned.
- o Continue Battle Lab experiments, including Ops/Combat support integration between GCCS, GCSS, and Service systems

3rd Qtr

- o Demonstrate integrated enterprise management for network, and IDM components to achieve optimized information infrastructure quality of service management.
- o Deliver automated watch board capabilities to GCCS/GCSS for execution monitoring.
- o Continue Battle Lab experiments, including Ops/Combat support integration between GCCS, GCSS, DII COE, DISN, and service systems.

4th Otr

- o Collaboration and coalition information assurance transitions.
- o Demonstrate advanced knowledge-based decision-making and visualization capabilities for integrated GCCS/GCSS.

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Exhib	it R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: J	une 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/05					Advanced	NOMENCLA Informatio ITS-JPO)/P	n Technolo		s Joint Prog	ram
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Leading Edge Pilot Info Technology/T26	13.026	12.933	14.254						Contg	Contg

- o Initial capability for enhanced Joint Common Operational Picture coordination.
- o Continue Battle Lab experiments, including Ops/Combat support integration between GCCS, GCSS, and Service systems.
- 1st 4th Otr
- o Continue sustained enhancements of leading edge FY 00 deployed capabilities until they are full transitioned. FY 2002
- 2nd Otr
- o Course of action and execution monitoring in GCCS/Joint Operational Planning and Execution System (JOPES).
- o Joint Logistics decision support tools in GCSS.
- 3rd Otr
- o GCCS secure shared applications.
- o Demonstrate initial integration of theater operations and logistic decision tools.
- 4th Qtr
- o Demonstrate information flow monitoring tools in GIG/DII Control.
- o Active network intrusion response demonstration.
- o Demonstrate user adaptive battlespace awareness tools.
- $1^{st} 4^{th} Qtr$
- o Continue sustained enhancements of leading edge FY 01 support of leading edge deployed capabilities until they are fully transitioned.
- o Continue Battle Lab experiment, including Knowledge Management and NetOps Enterprise Management.

Exhibit R-3 Cost Anal	ysis									DATE: June 2001
APPROPRIATION/BUDGET RDT&E, Defense-Wide/05	ACTIVITY	PROGRAM E Advance In Joint Prog	format	ion Tec		NUMBER Information Technology/T26				
Cost Category Product Development		Performing Activity & Location	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total	Farget /alue of <u>Contract</u>
Engineering/technical services	C-CPAF MIPR MIPR	HAI, Arlington, VA SAIC,Arlington, VA SSC, San Diego,C/ SSC, Charleston, S BTG INRI	3.012 A 1.200	2.838 2.040 0.887 0.798 0.659 0.700	Dec 00 Dec 00 Nov 00 Dec 00 Dec 00	3.399 2.392 1.040 0.936 0.773 0.821	Dec 01 Dec 01 Nov 01 Dec 01 Dec 01	Contg Contg Contg Contg Contg Contg		9.062 7.444 3.127 2.929 1.932 1.883
All other Contracts			1.842	2.244	Dec 00	1.773	Dec 01	Contg	Contg	N/A
Systems Engineering	C-CPAF	MITRE, Arlington VA	2.090	<u>2.767</u>	Nov 00	3.120	Nov 01	Contg	Contg	7.977
TOTAL			13.026	12.933		14.254				
					Page	8 of 8	3			

Exhib	it R-2, R	DT&E Budg	get Item J	ıstificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVIT RDT&E, Defense-Wide/06		R-1 ITEM NOMENCLATURE Defense Technical Information Services/PE 0605801K								
COST (in millions)	FY 00	FY01	FY02						Cost to Complete	Total Cost
Total Program Element Cost	45.495	44.187	44.228						Contg	Contg
001 Defense Technical Information Center	35.663	34.355	33.492						Contg	Contg
002 Information Analysis Centers	9.832	9.832	10.736						Contg	Contg

A. Mission Description and Budget Item Justification: The Defense Technical Information Services Program Element provides resources for the Defense Technical Information Center (DTIC) and the DoD Information Analysis Centers (IACs). DTIC's mission and function is to provide for the centralized operation of DoD Services for the acquisition, storage, retrieval, and dissemination of Scientific and Technical Information (STI), including data which is restricted, controlled and/or classified. DTIC also functions as the central activity within the DoD for exploring and applying advanced techniques and technology to DoD STI systems and for developing improvements in service and STI transfer effectiveness. The purpose of the program is to permit timely and effective exchange of information, to improve research, to avoid unnecessary duplication of effort and resources, and to improve decision making. DTIC's concept of operations is to function as the front door to DoD unclassified and unlimited information resources for customers internal and external to DoD; as the door to controlled information resources for internal DoD use; and as a repository and processor for STI and one-stop shopping. The military, universities, managers, scientists, engineers, and contractors look to DTIC to serve as a DoD Information utility and to provide for leadership in the advancement of information access, sharing and knowledge management. The IACs are contractor-operated research organizations chartered by OSD to collect, analyze, synthesize and disseminate worldwide scientific and technical information in specialized fields to prevent re-inventing research and to promote standardization within these fields. The DTIC IAC Program Management Office provides management and oversight of 13 IACs and funds operations of 12 IACs. DTIC currently serves information from its collection to approximately 5500 registered organizations located in the U.S. and overseas. In addition, DTIC operates 100 websites (e.g. Homepages and associated web pages) for itself and other organizations with an average of 45,000,000 accesses per month in FY 00. The Program Element is under Budget Activity 6, RDT&E Management Support, which provides for the support of operations required for general research and development and not allocable to specific missions.

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Exhibit R-2, RDT&E Budget Item Justification

DATE: June 2001

APPROPRIATION/BUDGET ACTIVITY

RDT&E, Defense-Wide/06

R-1 ITEM NOMENCLATURE

Defense Technical Information Services/PE 0605801K

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to changes.

FY 2000 Accomplishments:

DTIC: Funded ongoing basic operations including input of information (media conversion where needed, cataloging, abstracting, and indexing), output of products and services, personnel, maintenance of equipment, postage and support services paid to other government agencies via Inter-service Support Agreements. Developed web-based distance learning courses to disseminate information about DTIC products and services. Developed enhanced functional capabilities for the Electronic Document Management System including additional electronic submission capabilities. Expanded efforts to improve the receipt, storage, and dissemination of full text information in electronic formats. (1 Qtr - 4 Qtr; \$32.889 Million).

- o Managed and executed Science & Technology (S&T) Business Process Reengineering initiatives for the Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). Electronically collected, validated and disseminated the DoD's Annual FY 99 In-House RDT&E Activity Report. Maintained the Research and Development Descriptive Summary (RDDS) database and website updated with approved FY01 budget data. Developed and implemented the BioSystems website and data collection tool. Identified requirements and best practices for the DoD Technology Area Review and Assessment (TARA) program and the Virtual Technology Exposition (VTE) program (Phase I). Developed TARA Best Practices and VTE databases and prototype Websites. Continued enhancements and redesign to the DoD S&T InfoWeb, the S&T Collaboration Tool, and the Defense Technology Area Plan (DTAP) databases and Website (2 Otr 4 Otr; \$2.190 Million).
- o Expanded Defense Virtual Library to include digital moving images, using national standards for resource discovery and adding "preservation metadata" which is the information required to reformat and update materials to newer software and hardware platforms (2 Otr 4 Otr; \$.267 Million).
- o Completed first phase replacement of unclassified Defense Research Development Test and Evaluation Online System (DROLS), DTIC's 30 year old primary online system. Defined a modular web-based architecture for DTIC's online systems. Developed functional requirements for an online user registration system (2 Qtr 4 Qtr; \$.317 Million).

IAC: Provided basic center operations for DoD IACs to collect, analyze, synthesize and disseminate worldwide scientific and technical information in support of DoD's critical technologies and the warfighter, provided contracting officer's technical representative and security support for each of the DTIC sponsored, contractor-operated IACs (1 Qtr - 4 Qtr; \$9.300 Million). Examples of accomplishments include:

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Exhibit R-2, RDT&E Budget Item Justificat	ion	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information	Services/PE 0605801K

- o Supported the warfighter with push/pull technology that provided services and created unique products which will ensure military technological superiority.
- o Provided substantial science and technology information in support of the Defense Technology Objectives and the Joint Warfighter Science and Technology Plan to develop and transition superior technology which enables an affordable and decisive military capability.
- o Refocused and started migration of IACs to better support Joint Vision 2010.
- o Incorporated modernization techniques and equipment to provide state-of-the-art electronic access and dissemination of IAC products and services.
- o Continued conversion of fragile historical archives into electronic media to preserve critical information and provide a totally paperless environment.
- o Pursued new technologies with potential for overcoming existing barriers to information communication among the IAC user community.
- o Consolidated IAC websites at DTIC for improved security and commonality for future DoD Web/NIPRNET/SIPRNET.
- o Exploited foreign exchange of authorized information through links previously established with DoD operational, intelligence, and other government agencies.
- o Updated and monitored secure systems.

Funded ongoing program management operations including communications, security, and promoting awareness of IAC capabilities. Enhanced the Office Filing System (OFS) providing electronic capabilities for seamless program operations and processes. Identified and managed government information collections abandoned by disestablished organizations to be transferred and incorporated into the IAC program. Negotiated/conducted one new competitive procurement (1 Qtr - 4 Qtr; \$.532 Million).

\$45.945M Total

FY 2001 Plans:

DTIC: Funds ongoing basic operations including input of information (media conversion where needed, cataloging, abstracting, and indexing), delivery of products and services including web support, personnel, maintenance of equipment, postage and support services paid to other government agencies via Inter-service Support Agreements. Enhance the Electronic Document Management System to include additional output formats/products. Enhance application of distance learning capabilities and develop a distance learning course repository and associated learning portal on the World Wide Web (1 Qtr - 4 Qtr \$31.105 Million).

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Exhibit R-2, RDT&E Budg	DATE: June t Item Justification	2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information Services/PE	0605801K

- o Manage and execute Science & Technology (S&T) Business Process Reengineering initiatives for the Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). Electronically collect, validate, and disseminate DoD's FY00 In-House Activities Report. Update the Research and Development Descriptive Summary (RDDS) database and website with the latest data. Continue enhancements to the DoD S&T InfoWeb, the S&T Collaboration Tool, the BioSystems program, and the Defense Technology Area Plans (DTAP) databases and Websites. Identify FY01 Best Practices for the DoD Technology Area Review and Assessment (TARA) program. Continue development of the Virtual Technology Exposition (VTE) program (Phase II). Develop a search engine "web-spider" "push-pull" capability to populate database with information about emerging technologies. Demonstrate and market VTE to the S&T community (1 Qtr 4 Qtr \$2.447 Million).
- o Expand Defense Virtual Library (DVL) to include complex digital objects (integrated text, sound, and moving images). Initiate security techniques (authentication/encryption) and implementation of DVL technology into production environments (2 Qtr 4 Qtr; \$.400 Million).
- o Continue to enhance the unclassified Defense RDT&E Online System (DROLS), and further integration with other DTIC unclassified systems. Complete the first phase of the registration system redesign with capabilities to include porting to Oracle and supporting registration of individuals (2 Qtr 4 Qtr; \$.403 Million).

IAC: Provide basic center operations for DoD IACs to collect, analyze, synthesize and disseminate worldwide scientific and technical information in support of DoD's critical technologies and the warfighter; provide contracting officer's technical representative and security support for each of the DTIC sponsored, contractor operated IACs (1 Qtr - 4 Qtr; \$9.300 Million). Examples of planned accomplishments include:

- o Provide substantial science and technological information in support of the Defense Technology Objectives and the Joint Warfighter Science and Technology Plan to develop and transition superior technology which enables affordable and decisive military capabilities.
- o Assimilate modernization techniques and equipment to provide state-of-the-art electronic access and dissemination of IAC products and services.
- o Update and monitor secure systems.

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Exhibit R-2, RDT&E Budget Ite	Justification DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/06	R-1 ITEM NOMENCLATURE Defense Technical Information Services/PE 0605801K

- o Enhance efforts to totally convert fragile historical archives into electronic media to preserve critical information and provide a totally paperless environment.
- o Promote IAC awareness through increased program development activities with particular emphasis on IAC's CINC/ warfighter support capabilities.
- o Review, revise, implement and monitor strategic plan and performance measurements to support continual oversight, assessment, and improvement of DoD IACs.
- o Provide IAC Program access to secure government networks to enable full-spectrum science and technology support to the CINCs/warfighters.

Funds ongoing program management operations including communications, security, and promoting awareness of IAC capabilities. Continue to identify and manage government information collections abandoned by disestablished organizations to be transferred and incorporated into the IAC program. Negotiate/conduct four new competitive procurements (1 Qtr - 4 Qtr; \$.532 Million). \$44.187M Total

FY 2002 Plans:

DTIC: Funds ongoing basic operations including input of information (media conversion where needed, cataloging, abstracting, and indexing), output of products and services, personnel, maintenance of equipment, postage and support services paid to other government agencies via Inter-service Support Agreements. Enhance application of distance learning capabilities by development of additional courses and by expanding the learning portal. Continue modernization efforts for the Electronic Document Management System to support software/hardware upgrades and additional storage capacity. (1 Qtr - 4 Qtr; \$30.005 Million).

O Business Process Reengineering - Manage and execute Science & Technology (S&T) BPR initiatives for the Deputy Under Secretary of Defense for Science and Technology (DUSD(S&T)). Electronically collect and disseminate DoD's FY01 RDT&E In-House Activities Report. Update the Research and Development Descriptive Summary (RDDS) website with the latest data. Continue enhancements to the DoD S&T InfoWeb, the S&T Collaboration Tool, the BioSystems program, and the Defense Technology Area Plans (DTAP) databases and websites. Identify FY 02 Best Practices for the DoD Technology Area Review and Assessment (TARA) Program. Continue development and population of Virtual Technology Exposition (VTE) program (Phase II). Continue to develop "push-pull" technology. Continue to market VTE. (2 Qtr - 4 Qtr; \$2.472 Million).

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	Exhibit R-2, RDT&E Budget Item Justificat	ion	DATE: June 2001
APPROPRIATION/BUDGET RDT&E, Defense-Wide/06		R-1 ITEM NOMENCLATURE Defense Technical Information	Services/PE 0605801K

- o Expand capabilities of the Defense Virtual Library, emphasizing interoperability among federated repositories, and strengthening security techniques (authentication/encryption) initiated in FY2001. (2 Qtr 4 Qtr; \$.440 Million).
- o Continue to modernize the unclassified DROLS infrastructure, and begin initial development of the classified DROLS environment. (2 Otr 4 Otr; \$.575 Million).

IAC: Provides basic center operations for DoD IACs to collect, analyze, synthesize and disseminate worldwide scientific and technical information in support of DoD's critical technologies and the warfighter; provide contracting officer's technical representative, and security support for each of the DTIC sponsored, contractor operated IACs (1 Qtr - 4 Qtr; \$9.984 Million). Examples of planned accomplishments include:

- o Continue to provide substantial science and technological information in support of the Defense Technology Objectives and the Joint Warfighter Science and Technology Plan to develop and transition superior technology which enables an affordable and decisive military capability.
- o Continue efforts to promote IAC awareness through increase interaction with CINCs/warfighters.
- o Enhance efforts to totally convert fragile historical archives into electronic media to preserve critical information and provide a totally paperless environment.
- o Update and monitor secure systems.
- o Support the warfighter with push/pull technology that provides services and creates unique products which will help to ensure military technological superiority.
- o IAC program development, support, and coordination of feasibility studies to identify critical scientific and technical opportunities to user communities for establishment of new IACs.

Funds ongoing program management operations including communications, security, and promoting awareness of IAC capabilities. Identify and manage government information collections abandoned by disestablished organizations to be transferred and incorporated into the IAC program. Negotiate/conduct two new competitive procurements (1 Qtr - 4 Qtr; \$.752 Million).

\$44.228M Total

Exhibit R-2, RDT&E Budget Item Justification

DATE: June 2001

ADDD∩DD 1	TA TT T A T	/BIIDCET	ACTIVITY

RDT&E, Defense-Wide/06

R-1 ITEM NOMENCLATURE

Defense Technical Information Services/PE 0605801K

B. Program Change Summary:

		Cost in Millio	ns
	FY 00	FY 01	FY 02
Previous President's Budget (FY 2001)	45.495	45.350	$4\overline{4.679}$
Appropriated Value	46.655	45.350	
Adjustment to Appropriated Value	-1.160	-1.163	
Adjustment to Budget Year since FY 2001 President's Budget			451
Current Budget Submission/President's Budget (FY 2002)	45.495	44.187	44.228

Change Summary Explanation:

- FY 2000 changes due to below threshold reprogramming.
- FY 2001 changes due to congressional rescission and below threshold reprogramming.
- FY 2002 changes are due to revised fiscal guidance.
- C. Other Program Funding Summary: No related efforts

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DATE: June 2001 Exhibit R-2, RDT&E Budget Item Justification APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE RDT&E, Defense-Wide/07 C4I Interoperability/PE 0208045K FY00 FY01 FY02 COST (in millions) Cost to Total Complete Cost Total Program Element 25.999 35.672 41.389 Conta Conta 16.954 25.990 30.298 Test and Evaluation/T30 Conta Conta Major Range Test Facility 9.045 9.682 11.091 Conta Conta Base (MRTFB)/T40

A. <u>Mission Description and Budget Item Justification</u>: Provides life cycle test, evaluation, certification and technical support for all DoD National Security Systems/Information Technology Systems (NSS/ITS) to assure the warfighter that the Commander in Chief (CINC), Service, and Agency systems are effectively interoperable, compatible and integrated in a joint and combined environment. Serves as the Operational Test Agency (OTA) to test/certify the operational effectiveness and suitability of the Defense Information Systems Network (DISN), Defense Message System (DMS), Global Command and Control System (GCCS), Global Combat Support System (GCSS), and other systems managed or procured by the Defense Information Systems Agency. Functions as a member of DoD's Major Range and Test Facility Base (MRTFB). This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 RDT&E, Dune 2001 RDTE: June 2001 RDTE: June 2001

B. Program Change Summary:

	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>
Previous President's Budget (FY 2001) Appropriated Value	23.629 27.366	37.072 37.072	37.815
Appropriated value Adjustments to Appropriated Value	-1.367	-1.400	
Adjustments to Budget Year Since FY 2001 President's Budget			3.574
Current Budget Submit/President's Budget (FY 2002)	25.999	35.672	41.389

Change Summary Explanation:

FY 2000 change is due to below threshold reprogramming.

FY 2001 adjustments are due to Congressional rescission and below threshold reprogramming.

FY 2002 adjustments are due to revised fiscal guidance and a departmental initiative providing funds for the Joint Distributed Engineering Plant (JDEP).

Exhibit R-2a, RDT&E Project Justification							DATE: June 2001			
					r NAME AN nd Evalua					
COST (in millions)	FY00	FY01	FY02			·			Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

A. Mission Description and Budget Item Justification: This project provides direct test funds to support test and evaluation requirements of DoD Directive 4630.5 and DoD Directive 5000 series. Provides life cycle test, evaluation, certification and technical support for all DoD National Security Systems/Information Technology Systems (NSS/ITS) to assure the warfighter that the Commander in Chief (CINC), Service, and Agency systems are effectively interoperable, compatible and integrated in a joint and combined environment. Serves as the Operational Test Agency (OTA) to test/certify the operational effectiveness and suitability of the Defense Information Systems Network (DISN), Defense Message System (DMS), Global Command and Control System (GCCS), Global Combat Support System (GCSS), and other systems managed or procured by the Defense Information Systems Agency.

FY 2000 Accomplishments:

o Provided Operational Test and Evaluation (OT&E) of systems acquired, assigned or managed by the Defense Information Systems Agency (DISA) to determine if the systems meet users' requirements through evaluation in their true operational environment using real users as operators. Conducted OT&E of Global Command and Control System (GCCS) 4.0 and Joint Operation Planning and Execution System (JOPES) 2000, which is a component of GCCS, to ensure operational requirements are met in a real operational environment; provided assistance in identifying and developing the Global Combat Support System (GCSS) test strategy, drafting of Test and Evaluation Master Plan (TEMP) Part IV, developing GCSS system documentation; performed GCCS and GCSS functional tests to determine if the systems meet functional requirements; conducted interoperability test and certification between GCCS and Global Command and Control System-Maritime (GCCS-M) to ensure end-to-end interoperability between GCCS and the Navy/Marine version of GCCS; performed operational assessments of Defense Message System (DMS) release 2.2 and follow-on maintenance releases to ensure operational effectiveness and suitability; conducted DMS systems/interfaces functional tests to determine if DMS meets functional requirements; performed operational assessments of Defense Information Systems Network (DISN) Video Services to ensure operational effectiveness and suitability; test procedures and methodology for Defense Information Infrastructure (DII) Common Operating Environment (COE) compliance testing (Oct 1999 - Sep 2000; \$5.451M)

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Exhibit R-2a, RDT&E Project Justification							DATE: June 2001			
					PROJECT NAME AND NUMBER Test and Evaluation/T30					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

FY 2000 Accomplishments continued:

- o Conducted joint interoperability test and certification on DoD C4I systems to ensure end-to-end interoperability, compatibility and integration. Completed Tactical Data Information Link (TADIL) A/B/J certification tests, which include Joint Interoperability Test (JIT) plan and reports, development of status documents (REDBOOK) and conduct of Joint Analysis Review Panel (JARP) (for example: Joint Stars T-J, Patriot T-J, F-15E T-J, F18/MIDS (Multi Function Information Distribution System) LVT T-J, Joint Air Defense System Integrator (ADSI) T-J, E-2 GRP II T-J); US Message Text Format (USMTF) 2000 baseline messages, standards conformance test for Joint Message Preparation System (JMPS) version 3.0.0.0A, and test of messages for compliance to 2000 release of Military Standard-6040; certification testing of Navy communications systems in support of Navy transition to DMS; certification testing of joint C4I systems to ensure end-to-end interoperability, compatibility and integration, which include High Frequency Radio/Auto Link Establishment, Intelligence Systems, Inter-Theater COMSEC Project, Joint DII Communications System (JDIICS-D), Newbridge ATM, and MILSTAR Low Data Rate; DoD Interoperability Communications Exercise (DICE) employing over 20 systems to determine end-to-end interoperability of DoD major switch systems and the Joint User Switch Exercise (JUSE) (Oct 1999 Sep 2000; \$9.162M)
- o Provided on-site exercise support for 10 exercises (pre-exercise architecture review and analysis, architecture documentation, operational assessments, traffic loading and simulation, testing), which included All Services Combat Identification Evaluation Team (ASCIET), FOAL EAGLE, COBRA GOLD, TANDEM THRUST, BRIGHT STAR, UNIFIED ENDEAVOR/FUERTES DEFENSAS, INTERNAL LOOK, CROCODILE, LUCKY SENTINEL AND CABANAS; on-site exercise support to identify and resolve technical issues, identify uncertified and/or untested interfaces, and determine compliance with CJCSM 6231; technical assistance to Operation STABILIZE by assisting in the installation of E1 Trunk Interface between the US AN/TTC-39D tactical switch and the Australian NEC/NEAX 7400 ICS commercial switch; solutions to problems raised in hotline calls; published 4 issues of Lessons Learned Reports (Oct 1999 Sep 2000; \$2.341M)
- o Total \$16.954M

Exhibit R-2a, RDT&E Project Justification							DATE: June 2001			
					PROJECT NAME AND NUMBER Test and Evaluation/T30					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

FY 2001 Plans:

- o Provide Operational Test and Evaluation (OT&E) of systems acquired, assigned or managed by the Defense Information Systems Agency (DISA) to determine if the systems meet users' requirements through evaluation in their true operational environment using real users as operators. Conduct OT&E of Global Command and Control System (GCCS) major releases to ensure operational requirements are met in a real operational environment; conduct GCCS and Global Combat Support System (GCSS) functional tests for 8-10 applications to determine if the systems meet functional requirements; interoperability test and certification between GCCS and Service versions of GCCS to ensure end-to-end interoperability; operational assessments of Defense Message System (DMS) software releases and follow-on maintenance releases to ensure operational effectiveness and suitability; conduct DMS functional tests for 20 systems/interfaces to determine if the system meets functional requirements; conduct operational assessments of Defense Information Systems Network (DISN) services and components to ensure operational effectiveness and suitability; perform OT&E of DISN Integrated Network Management System to ensure operational effectiveness and suitability; test procedures and methodology for Defense Information Infrastructure (DII) Common Operating Environment (COE) compliance testing (Oct 2000 Sep 2001; \$2.478M)
- o Conduct joint interoperability test and certification on DoD C4I systems to ensure end-to-end interoperability, compatibility and integration. Complete Tactical Data Information Link (TADIL) A/B/J certification tests (for example: Joint Stars T-J, Patriot T-J, F-15E T-J, F18/MIDS LVT T-J, Joint Air Defense System Integrator (ADSI) T-J, E-2 GRP II T-J); perform certification testing of Navy communications systems in support of Navy transition to DMS; perform certification testing of joint C4I systems to ensure end-to-end interoperability, compatibility and integration; conduct DoD Interoperability Communications Exercise (DICE) employing over 20 systems to determine end-to-end interoperability of DoD major switch systems (Oct 2000 Sep 2001; \$11.899M)

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Exhibit R-2a, RDT&E Project Justification							DATE: Ju	ne 2001		
					r NAME AN nd Evalua					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

FY 2001 Plans continued:

- o Implement Phase I of the Risk Mitigation Network, which will provide DoD with an off-line capability to test and resolve problems with systems that transport on or interface with the DISN (Oct 2000 Sep 2001; \$5.335M)
- o Provide on-site exercise support for 10 exercises (pre-exercise architecture review and analysis, architecture documentation, operational assessments, traffic loading and simulation, testing); on-site exercise support to identify and resolve technical issues, identify uncertified and/or untested interfaces, and determine compliance with CJCSM 6231; provide solutions to problems raised in hotline calls; publish 4 issues of Lessons Learned Reports (Oct 2000 Sep 2001; \$3.278M)
- o Provide combined interoperability test support to Commanders-in-Chief (CINCs) to ensure that U.S. and coalition systems will interoperate within the Joint Task Force (JTF) (Oct 2000 Sep 2001; \$3.000M)
- o Total \$25.990M

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Exhibit R-2a, RDT&E Project Justification							DATE: Ju	ne 2001		
					r name an nd Evalua					
COST (in millions)	FY00	FY01	FY02			·			Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

FY 2002 Plans:

- o Provide Operational Test and Evaluation (OT&E) of systems acquired, assigned or managed by the Defense Information Systems Agency (DISA) to determine if the systems meet users' requirements through evaluation in their true operational environment using real users as operators. Conduct OT&E of Global Command and Control System (GCCS) software versions and components to ensure operational requirements are met in a real operational environment; GCCS and Global Combat Support System (GCSS) functional tests for 8-10 applications to determine if the systems meet functional requirements; perform interoperability test and certification between GCCS and Service versions of GCCS to ensure end-to-end interoperability; conduct operational assessments of Defense Message System (DMS) software releases and follow-on maintenance releases to ensure operational effectiveness and suitability; conduct DMS functional tests for 20 systems/interfaces to determine if the system meets functional requirements; conduct operational assessments of Defense Information Systems Network (DISN) services and components to ensure operational effectiveness and suitability; perform OT&E of DISN Integrated Network Management System to ensure operational effectiveness and suitability; test procedures and methodology for Defense Information Infrastructure (DII) Common Operating Environment (COE) compliance testing (Oct 2001 Sep 2002; \$2.938M)
- o Conduct joint interoperability test and certification on DoD C4I systems to ensure end-to-end interoperability, compatibility and integration. Complete Tactical Data Information Link (TADIL) A/B/J certification tests (for example: Joint Stars T-J, Patriot T-J, F-15E T-J, F18/MIDS LVT T-J, Joint Air Defense System Integrator (ADSI) T-J, E-2 GRP II T-J); perform certification testing of Navy communications systems in support of Navy transition to DMS; perform certification testing of joint C4I systems to ensure end-to-end interoperability, compatibility and integration; conduct DoD Interoperability Communications Exercise (DICE) employing over 20 systems to determine end-to-end interoperability of DoD major switch systems (Oct 2001 Sep 2002; \$12.099M)

Exhi	bit R-2a	, RDT&E Pi	roject Ju	stificatio	on			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		FRAM ELEME Interoper		E 0208045	δK		r name an nd Evalua			
COST (in millions)	FY00	FY01	FY02			·			Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

FY 2002 Plans continued:

- o Continue to implement Phase I of the Risk Mitigation Network, which will provide DoD with an off-line capability to test and resolve problems with systems that transport on or interface with the DISN (Oct 2001 Sep 2002; \$5.500M)
- o Provide management of the Joint Distributed Engineering Plant (JDEP) to establish and enforce procedures, maintain scheduling, and provide problem resolution support to Service node network/connectivity. (Oct 2001 Sep 2002; \$3.220M)
- o Provide on-site exercise support for 10 exercises (pre-exercise architecture review and analysis, architecture documentation, operational assessments, traffic loading and simulation, testing); on-site exercise support to identify and resolve technical issues, identify uncertified and/or untested interfaces, and determine compliance with CJCSM 6231; provide solutions to problems raised in hotline calls; publish 4 issues of Lessons Learned Reports (Oct 2001 Sep 2002; \$3.541M)
- o Provide combined interoperability test support to Commanders-in-Chief (CINCs) to ensure that U.S. and coalition systems will interoperate within the Joint Task Force (JTF) (Oct 2001 Sep 2002; \$3.000M)
- o Total \$30.298M

Exhi	bit R-2a	, RDT&E Pi	roject Jus	stificatio	on			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		OGRAM ELEMENT I Interoperability/PE 0208045K PROJECT NAME AND NUMBER Test and Evaluation/T30								
COST (in millions)	FY00	FY01	FY02			•			Cost to Complete	Total Cost
Project Cost	16.954	25.990	30.298						Contg	Contg

- B. Other Program Funding Summary: NA
- C. <u>Acquisition Strategy</u>: This project is supported by a competitively awarded, non-personal services contract composed of three prime contracts with multiple sub-contracts. The contracts, which are cost plus award fee, provide maximum flexibility on assignment of tasks for cost and technical effectiveness, and allow for expansion and contraction of staff years as workload expands and contracts.
- D. Schedule Profile:

FY 2000 - FY 2002

1st Quarter - 4th Quarter: Operational test and evaluation of C4I systems managed and/or procured by the Defense Information Systems Agency such as: Global Command and Control System (GCCS), Global Combat Support System (GCSS), Defense Message System (DMS), and Defense Information Systems Network (DISN); Tactical Data Information Link (TADIL) A/B/J certification tests to ensure interoperability among air defense systems; joint and combined interoperability tests to ensure that DoD and coalition systems will interoperate in a joint and/or combined environment; conduct DoD Interoperability Communications Exercise (DICE); implementation of C4I Risk Mitigation Network, which provides DoD with an off-line capability to test and resolve problems on systems that transport on or interface with the Defense Information System Network (DISN); establish management of the Joint Distributed Engineering Plant (JDEP) to provide a hardware-in-the-loop environment to identify, evaluate, isolate, and find solutions to Joint Force interoperability problems; provide CINC exercise support; identify solutions to operational problems such as: failure of a system to interoperate with another system when used in an operational environment; Lessons Learned Reports to document problems and fixes to those problems for distribution to the Commanders-in-Chief (CINCs) and Services; provide on-site support for real-world contingencies such as: Bosnia, Kosovo, and Haiti.

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Exhibit R-3 Cost Analys	sis									DATE:	June 2001		
APPROPRIATION/BUDGET A	CTIVITY	PROGRAM C4I Inte			/PE 020	08045K			PROJECT NAME AND NUMBER Test and Evaluation/T30				
Test and Evaluation													
Cost Category	Method	Performing Activity & Location	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>			
Engineering/Technical Services		TRW Ft Hua, AZ	6.994	1.769	03/01				8.763	8.763			
	CPAF/	Interop Ft Hua, AZ	7.138	6.727	03/01				13.865	13.865			
	CPAF/	Validity Ft Hua, AZ	8.244	1.441	03/01				9.685	9.685			
		TBD				13.617	TBD	TBD	TBD	TBD			
Subtotal Contracts				9.937		13.617							
In house				16.053		16.681							
Total Project				25.990		30.298							
NOTE: New OMNIBUS contracts will to	oe awarded i	n FY02.											
					Page 1	10 of 1	4						

Exhil	oit R-	2a, RDT&E P	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		ROGRAM ELEM I Interope:		PE 0208045	K	 I NAME AN Range Tes		y Base/T40	
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	9.04	5 9.682	11.091					Contg	Contg

A. Mission Description and Budget Item Justification: This project provides Institutional funds for DISA's Joint Interoperability Test Command (JITC), which is a member of DOD's Major Range Test Facility Base (MRTFB), in accordance with DoD Directive 3200.11 and letter dated 21 Jan 1992 designating JITC as a member of the MRTFB. Institutional funds cover costs that cannot be passed along to customers, such as test support expenses, testbed maintenance expenses, base operating support and facility and logistics support.

FY 2000 Accomplishments:

- o Maintained JITC's automated test and mission support systems to facilitate test and evaluation and maximize use of test assets; maintained internal project and resource management information systems to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; developed automated support for management of contracts, manpower and fiscal resources (Oct 1999 Sep 2000; \$2.142M)
- o Provided base operations support to JITC's testing mission (Oct 1999 Sep 2000; \$1.300M)
- o Maintained the JITC testbeds and test facilities at Fort Huachuca, AZ, and Indianhead, MD for DOD use (Oct 1999 Sep 2000; \$5.603M)
- o Total \$9.045M

Exhil	bit R-	2a, RDT&E I	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		ROGRAM ELEM I Interope		PE 0208045	K	 I NAME AN Range Tes		y Base/T40	
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	9.04	5 9.682	11.091					Contg	Contg

FY 2001 Plans:

- o Maintain JITC's automated test and mission support systems to facilitate test and evaluation and maximize use of test assets; maintain internal project and resource management information systems to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; develop automated support for management of contracts, manpower and fiscal resources (Oct 2000 Sep 2001; \$2.361M)
- o Provide base operations support to JITC's testing mission (Oct 2000 Sep 2001; \$1.433M)
- o Maintain the JITC testbeds and test facilities at Fort Huachuca, AZ, and Indianhead, MD for DOD use (Oct 2000 Sep 2001; \$5.888M)
- o Total \$9.682M

FY 2002 Plans:

- o Maintain JITC's automated test and mission support systems to facilitate test and evaluation and maximize use of test assets; maintain internal project and resource management information systems to provide cost accounting reports to track and catalog customer expenses for internal and external processes and customer disclosure; develop automated support for management of contracts, manpower and fiscal resources (Oct 2001 Sep 2002; \$2.417M)
- o Provide base operations support to JITC's testing mission (Oct 2001 Sep 2002; \$1.445M)

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Exhi	bit R-2a	, RDT&E P	roject Ju:	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		FRAM ELEME Interoper		E 0208045	K	 r name an Range Tes		y Base/T40	
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	9.045	9.682	11.091					Contg	Contg

FY 2002 Plans continued:

- o Maintain the JITC testbeds and test facilities at Fort Huachuca, AZ, and Indianhead, MD for DOD use (Oct 2001 Sep 2002; \$6.249M)
- o Provide connectivity and network maintenance for the Joint Distributed Engineering Plant (JDEP) Network Operations Center (Oct 2001 Sep 2002; \$.980M)
- o Total \$11.091M
- B. Other Program Funding Summary: NA
- C. <u>Acquisition Strategy</u>: This project is supported by a competitively awarded, non-personal services contract composed of three prime contracts with multiple sub-contracts. The contracts, which are cost plus award fee, provide maximum flexibility on assignment of tasks for cost and technical effectiveness, and allow for expansion and contraction of staff years as workload expands and contracts.
- D. Schedule Profile:

FY 2000 - FY 2002

 1^{st} Quarter - 4^{th} Quarter: Host Base Operations Support, MRTFB mandated cost accounting information systems, overhead supporting MRTFB, JDEP connectivity and maintenance, and testbed maintenance.

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Exhibit R-3 Cost Analy	sis									DATE: June 2001	
APPROPRIATION/BUDGET A RDT&E, Defense-Wide/07	CTIVITY	PROGRAM C4I Inte			/PE 02	08045K		PROJECT NAME AND NUMBER Major Range Test Facility Base/T40			
Major Range Test Facility Base (MRTF	-B <u>)</u>										
Cost Category		Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total <u>Cost</u>	Target Value of <u>Contract</u>	
Engineering/Technical Services	CPAF/ C	TRW Ft Hua, AZ	.540	.203	03/01				.743	.743	
	CPAF/	Interop	9.900	3.324	03/01				13.224	13.224	
	C CPAF/ C	Ft Hua, AZ Validity	1.611	.532	03/01				2.143	2.143	
	TBD	Ft Hua, AZ TBD				5.178	TBD	TBD	TBD	TBD	
Subtotal Contracts				4.059		5.178					
In-house				5.623		5.913					
Total Project				9.682		11.091					
NOTE: New OMNIBUS contracts will b	e awarded i	n FY02.									
					Page :	14 of :	14				

Exhi	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						NOMENCLA Military (stem (NMCS)	Support/PE	0302016К
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Total Program Element	.497	.610	1.014						Contg	Contg
NMCS Command Center Engineering/S32	.497	.610	1.014						Contg	Contg

A. Mission Description and Budget Item Justification:

This program provides concept development, requirements definition, technical specifications, proof-of-concept testing, rapid prototyping, technology insertions, systems engineering and integration and technical assessments for National Military Command System (NMCS) Command and Control (C2) systems. This support provides informed, decisionmaking linkage between the National Command Authorities (NCA) and the Commanders-in-Chief of the Unified and Specified Commands. This engineering draws upon improved C2 methodologies and technology insertion opportunities to meet the command, control and information requirements of the NCA and the CINCs for all crises and security threats involving US military forces. These efforts emphasize interoperability and are designed to contribute directly to the achievement of the global C4I infrastructure. The primary customer is the Joint Staff. As the DOD Systems Engineer for the National Military Command Center (NMCC) and the Alternate NMCC (ANMCC), DISA performs planning, integration, and testing/ evaluation of new systems or improvements to existing systems. Support is provided to the Joint Staff in configuration management of over 120 systems. Engineering support is provided in the planning and implementation of the relocation of the NMCC as part of the Pentagon renovation (NMCC is scheduled to transition to a new location in FY 2003). Beginning FY 2002, funding from the program C4I for the Warrior (PE 0303149K) will be transferred to this program in order to support the Site R Integration Program (SRIP), which provides backup and mirroring of selected NMCC systems and provides software maintenance of the NMCC Command and Control System (NCCS) Automated Message Handling System (AMHS). This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibit R-2, RDT&E Budget Item Justification

DATE: June 2001

APPROPRIATION/BUDGET ACTIVITY

RDT&E, Defense-Wide/07

R-1 ITEM NOMENCLATURE

National Military Command System (NMCS) Support/PE 0302016K

FY00 Accomplishments:

- o NMCS Integration Engineering (1st Qtr 4th Qtr; \$197K).
 - NMCC Command and Control System (NCCS) Five Year Plan, NCCS Integration Engineering Technical Analysis/Cost Estimate (TA/CE).
- o Engineering Test & Evaluation (ET&E) of NMCS upgrades (1st Qtr 4th Qtr; \$300K).
 - National Military Command Center (NMCC) C2 systems redundancy evaluation, NCCS AMHS/Defense Message System (DMS) interface testing.
- o Total \$.497M

FY01 Plans:

- o NMCS Integration Engineering (1st Qtr 4th Qtr; \$230K).
 - NCCS Five Year Plan, NMCC relocation transition concept & plan
- o Engineering Test & Evaluation (ET&E) of NMCS upgrades (1st Qtr 4th Qtr; \$380K).
 - NMCC tech insertion evaluations, NCCS AMHS tests
- o Total \$.610M

FY02 Plans:

- o NMCS Integration Engineering (1st Qtr 4th Qtr; \$254K).
 - NCCS Five Year Plan, NMCC relocation transition engineering.
- o Engineering Test & Evaluation (ET&E) of NMCS upgrades (1st Otr 4th Otr; \$400K).
 - NMCC tech insertion evals, NMCS Information Resource Management Baseline System
- o Site R Integration Program (SRIP) (1st Qtr 4th Qtr; \$360K)
- Joint Staff Program to mirror NMCC capabilities as short-term backup at Site R for continuity of operations requirements.
- o Total \$1.014M

Page 2 of 4

Exhibit R-2, RDT&E Budget Item Justificat	ion	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE National Military Comman	nd System (NMCS) Support/PE 0302016K
B. Program Change Summary: Previous President's Budget (FY 2001) Appropriated Value Adjustments to Appropriated Value Adjustments to Budget Year since FY 2001 President's Budget Current Budget Submit/President's Budget (FY 2002) Change Summary Explanation: FY00 change reflects below threshold reprogramming. FY01 decrease due to congressional rescission and below FY02 increase reflects transfer from C4I for the Warrion		. 365 10 1.014
C. Other Program Funding Summary: To Operation & Maintenance $\frac{\text{FY00}}{.389} \frac{\text{FY01}}{.463} \frac{\text{FY02}}{.995} \frac{\text{Comp}}{.995}$ D. Acquisition Strategy: Work is tasked via cost plus fixed fee	3	lo wondorg including Powthoon F-
Systems, FGM and Telos. Tasking is done through defined task ordincrease and decrease. Contractual progress is measured and evalueports, deliverables and burn rates by the project manager and ordinary contractual progress.	ders, providing staffir Luated through monthly	ng flexibility as requirements reviews of schedule, status
E. Schedule Profile: FY 00 4 th Qtr NMCC Command and Control System (NCCS) Finallysis/Cost Estimate (TA/CE). Analysis/Cost Estimate (TA/CE). National Military Command Center (NMCC) of Integrate National C2 Systems; NMCC relocation and Evaluation of NMCS system 4 th Qtr Site R Integration Program (SRIP)	C2 systems redundancy ecation engineering	
Page 3 of	4	

Exhibit R-3 Cost Analys	sis								DA	ATE: June 2001
APPROPRIATION/BUDGET ACRDT&E, Defense-Wide/07	CTIVITY	PROGRAM ELEMENT National Military Command System (NMCS) Support/PE 0302016K PROJECT NAME AND NMCS Command Center								
Support Costs:										
Cost Category	Contract Po Method Ad & Type Lo	erforming ctivity & ocation	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>		Total <u>Cost</u>	Target Value of <u>Contract</u>
Engineering/Tech Svcs		aytheon E-Sys, rlington, VA	.497	.300	05/01	.300	05/02	Contg	Contg	1.097
Engineering/Tech Svcs	CPFF/SS S	AIC	0	.310	07/01	.714	01/02	Contg	Contg	1.024
Total Cost			.497	.610		1.014				

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Exhibi	t R-2, R	DT&E Budg	et Item J	ustificat	ion			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07					Defense I	NOMENCLA Information on/PE 0302	Infrastru	ıcture Engi	neering &	
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Total PE Cost: PE 0302019K	4.621	6.773	6.544						Contg	Contg
DII Systems Engineering and 1.956 2.206 1.583 Support/T62									Contg	Contg
Modeling & Simulation/E62	2.665	4.567	4.961						Contg	Contg

A. <u>Mission Description and Budget Item Justification</u>: This program element funds efforts involving the following areas: the development and fielding of the Defense Information Infrastructure (DII) Common Operating Environment (COE), engineering support of the DII including resolution of critical interoperability and technical integration issues, and the assessment of C4I initiatives that reside on the DII COE to ensure compatibility, interoperability and technical integration. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

B. Program Change Summary:

	FY 00	FY 01	FY 02
Previous President's Budget (FY 2001)	3.421	5.704	5.961
Appropriated Value	5.316	5.704	
Adjustments to Appropriated Value	695	1.069	
Adjustments to Budget Year Since FY 2001 President's Budget			.583
Current Budget Submit/President's Budget (FY 2002)	4.621	6.773	6.544

Page 1 of 13

Exhibit R-2, RDT&E Budget Item Justifica	tion	DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOMENCLATURE Defense Information Infrastru Integration/PE 0302019K	acture Engineering &
Charge Common Fordersting		

Change Summary Explanation:

FY 2000 change due to below threshold reprogramming.

FY 2001 change due to congressional rescission and below threshold reprogramming.

FY 2002 change reflects increase to support initiatives of growing importance including the ramifications of securing applications and data in a web environment.

Page 2 of 13

DATE: June 2001 Exhibit R-2a, RDT&E Project Justification APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NAME AND NUMBER RDT&E, Defense-Wide/07 DII Engineering & Integration/PE 0302019K DII Systems Engineering and Support/T62 COST (in millions) FY00 FY01 FY02 Cost to Total Complete Cost 2.206 Project Cost 1.956 1.583 Conta Conta

A. Mission Description and Budget Item Justification: Efforts under this project will strengthen critical Defense Information Infrastructure (DII) foundation technologies and programs through application of precise, short-term, technical, engineering and integration expertise. Provides expertise in support of the major DII components, which include: DII Common Operating Environment (COE), COE Data, Defense Information System Network (DISN), Defense Message System (DMS) and medium grade messaging, Global Combat Support System (GCSS), Global Command and Control System (GCCS), DOD Directory, DII Public Key Infrastructure (PKI), DII Control Concept (DIICC), enterprise management, Information Assurance (IA) and other related components. This project supports the definition and implementation of various aspects of evolving the DII. The evolution of the DII requires coordinated implementation of the DII components to form a coherent global information grid. This project supports definition of the common environments, developing system architecture constructs for the DII and components, providing engineering design and guidance for component evolution, including incorporation of new technology from industry and implementing the infrastructure capability. Subtasks are assigned based on need to address specific technical problems, mitigate risks and take advantage of cross-program synergies.

FY2000 Accomplishments:

- o DII Component Support (1st Otr 4th Otr; \$585K)
 - Facilitated and participated in the DMS Industry Panel and Senior Government Engineering Panel to recommend the roadmap for DMS.
 - Completed DOD Directory Roadmap and provided technical support to the DOD and DII COE Directories Working Groups.
 - Defined and evaluated alternatives for the Wideband Gapfiller System (WGS). WGS will serve as the next generation wide-band satellite communications system (SATCOM) architecture for all armed services. It will provide 24-hour wide-band service to tactical subscribers and fixed sites.
- Provided assessment of the Standard Procurement System (SPS) architecture.

Exhi	bit :	R-2a,	, RDT&E Pı	roject Jus	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	7		RAM ELEME Engineerin		ation/PE 0	302019К	 T NAME AN tems Engin		Support/T62	
COST (in millions)	FY	Y00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	1.9	956	2.206	1.583					Contg	Contg

FY2000 Accomplishments (Continued):

- o DII Integration (1st Qtr 4th Qtr; \$686K)
 - Provided quick assessment of the impacts of Windows 2000 for DII components.
 - Developed and refined evolution strategy for GCSS to integrated Service capabilities.
 - Began support for Provisioning 2000 (P2K). P2K will provide for the receipt, distribution, ordering, allocation, engineering, implementation, tracking and inventory management of communications services and equipment.
 - Facilitated and participated in the Technical Advisory Group (TAG). The TAG focused on Internet Protocol (IP) networks and directories preparation analysis. The group framed the approach to determine the technical way ahead for DOD's IP networks for the next 5 years.
- o GCSS and GCCS Integration (1st Qtr 4th Qtr; \$490K)
 - Developed a SIPRNET Search Engine concept, architecture and implementation plan for integration with GCSS and GCCS.
 - Continued identifying and resolving technical integration areas between current versions of GCCS, GCSS, COE and other DII components.
 - Developed GCCS 4.1 concept and architecture, including integration with GCSS, COE and other DII components.
- o Cross Program Integration Engineering (1st Qtr 4th Qtr; \$195K)
 - Facilitated requirements expression and roadmap inputs across programs that impact DII, including GCCS, DISN, DMS, GCSS, IA, Directories and Enterprise Services management. Facilitation method included sponsoring meetings and hosting a web site for technical information interchange.
- Performed analysis, hosted sessions and provided technical support for the Program Executive Officer (PEO) Interchange between Army, Navy, and Air Force technical representatives. Focus for FY 2000 was Command and Control (C2) program synchronization, Extensible Markup Language (XML) use, collaborative targeting and evolution. This process set the stage for increased interoperability of C2 systems through information exchange. o Total \$1.956M

Exhi	bit R-2	a, RDT&E P	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		OGRAM ELEME Engineerin		ation/PE 0	302019K	 I NAME AN tems Engin		Support/T62	
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	1.956	2.206	1.583					Contg	Contg

FY2001 Plans:

- o Technical support activities are those needed to develop engineering concepts, provide superior systems analyses, and assess system component designs. The detail of any given engineering task depends upon the status of each component at the particular point in evolution of the Global Information Grid.
- o DII Component Support (1st Qtr 4th Qtr; \$600K)
 - Perform DII component analysis, such as technical issues projected to be of importance to future C2 needs like single sign-on, the DOD white and yellow pages and enterprise search capabilities.
 - Support new and evolving architecture and implementation planning for DII components as necessary.
- o DII Integration (1st Qtr 4th Qtr; \$630K)
 - Facilitate and perform analysis for the Technical Advisory Group (TAG) and perform analysis for an industry-based advisory panel. FY 2001 will complete the Network TAG and continue the work on the sign-on TAG.
 - As requested, perform analysis related to integration within the DII (enterprise-level) components and Service/Agency-level components.
- o GCSS and GCCS Integration (1 $^{\rm st}$ Qtr 4 $^{\rm th}$ Qtr; \$605K)
 - Identify and resolve technical integration areas for the versions of GCCS and GCSS under development, including integration with intelligence capabilities and with other DII components as necessary. Continue implementation support for GCCS 4.1 and development of GCCS 5.x architecture
 - Continue implementation support for SIPRNET Search Engine.

Exhi	bit	R-2a,	, RDT&E Pi	roject Jus	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	?		RAM ELEME Engineering		ation/PE 0	302019К	 I NAME AN tems Engin		Support/T62	
COST (in millions)	F	Y00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	1.	956	2.206	1.583					Contg	Contg

FY2001 Plans(Continued):

- o Cross Program Integration Engineering (1st Otr 4th Otr; \$371K)
 - Facilitate cross-corporate harmonization of programs relative to the DII and the Global Information Grid (GIG). Harmonization identifies areas of technical overlap and opportunities across the Services, and helps to synchronize schedules and movement toward greater product integration.
 - Conduct analysis for Program Executive Officer (PEO) Interchange. In FY 2001, plans are to complete analysis started in FY 2000 on collaborative targeting, Extensible Mark-up Language (XML) and common COE components.
- o Total \$2.206M

FY2002 Plans:

- o DII Component Support (1st Qtr 4th Qtr; \$402K)
 - Perform DII component analysis, such as the use of DII COE components by GCCS and GCSS and the integration of certificate authentication into mission applications.
 - Support new and evolving architecture and implementation planning for DII components as necessary.
- o DII Integration (1st Qtr 4th Qtr: \$551K)
 - Facilitate and perform analysis for an industry-based advisory panel. Advisory panels will concentrate on the impact of Internet technologies on C2 systems.
 - As requested, perform analysis related to integration within the DII components, and between DII and Service/Agency-level components.
- o GCSS and GCCS Integration (1st Qtr 4th Qtr; \$394K)
 - Identify and resolve technical integration areas for versions of GCCS and GCSS under development, including integration with intelligence capabilities and other DII components as necessary.
 - Address evolving integration challenges such as Enterprise Services Management.

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Exhi	bit	R-2a,	, RDT&E Pı	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	7		RAM ELEME Engineerin		ation/PE 0	302019К	 I NAME AN tems Engin		Support/T62	1
COST (in millions)	F	Y00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	1.9	956	2.206	1.583					Contg	Contg

FY2002 Plans (Continued):

- o Cross Program Integration Engineering (1st Qtr 4th Qtr; \$236K)
 - Facilitate cross-corporate harmonization of programs relative to the DII and the GIG.
 - Participate in and conduct analysis for the PEO Interchange. PEO attention will focus on the next generation of C2 systems and the fielding of systems currently in development. Interchange allows DOD to leverage achievements and benefit from learning opportunities across the Department.
- o Total \$1.583M
- B. Other Program Funding Summary: N/A
- C. Acquisition Strategy: MITRE, McLean, VA.
- D. Schedule Profile:

Exhibit R-3 Cost Analysis								Dž	ATE: June 2001
APPROPRIATION/BUDGET ACTIVITED RDT&E, Defense-Wide/07	PROGRAM DII Engin	ELEMENT eering & Integ	gration,	/PE 030	2019K		JECT NAME AND Systems Engine		BER g and Support/T62
Support Costs:									
<u>Cost Category</u> Contrac Method <u>& Type</u>	Performing Activity & <u>Location</u>	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>		Total Cost	Target Value of <u>Contract</u>
Engineering/Tech Svcs FFRDC	MITRE, Mclean, VA	1.956	2.206	Various	1.583	Various	Contg	Contg	5.745

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Exhi	oit R-2a	, RDT&E P	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		GRAM ELEME Engineerin		ation/PE 0	302019К	 I NAME AN g & Simula			
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	2.665	4.567	4.961					Contg	Contg

A. Mission Description and Budget Item Justification: The mission of the DISA Modeling and Simulation/E62 project is to support the DOD communications planning and investment strategy for the successful deployment of DOD information systems by performing a broad spectrum of assessment activities in support of C4I programs. DISA has the lead in DOD for providing modeling, simulation and assessment of C4I requirements to DOD decision-makers—from the level of the Office of the Secretary of Defense (OSD) to the warfighter. DISA has achieved this position with services and a suite of analytical tools that are capable of identifying key decision points that impact DOD command and control information systems. This effort is essential to the DISA goal of achieving affordable, quality information services that provide cost-effective products and services. DISA modeling, simulation and assessment efforts support the full range of activities of system planning, engineering, implementation/upgrade, operations, training and security.

DISA modeling, simulation and assessment services and tools will (1) support the key DISA programs of Defense Message System (DMS), Information Assurance (IA), Defense Information Systems Network (DISN), Public Key Infrastructure (PKI) and Defense Travel System (DTS); (2) assess the DISA's ability to support CINCs, JS, Services, and other Federal agencies' current and emerging C4ISR (surveillance and reconnaissance) mission-driven information requirements; (3) enhance the functionality of government-off-the-shelf (GOTS) tools to achieve a superior integrated environment for the modeling and simulation efforts of DISN, DMS, IA, Global Combat Support System (GCSS), Global Command and Control System (GCCS), and PKI; (4) investigate methods linking these models with other GOTS that are used in information network analysis; and (5) explore the available commercial-off-the-shelf (COTS) tools appropriate for developing models that will be used for performance assessment of DOD information system architecture and communications.

FY2000 Accomplishments:

- o DISA Program Support provided modeling and analysis for the key DISA programs and initiatives of DMS, GCCS, DISN and DTS. $(1^{st}Qtr 4^{th}Qtr)$ \$1,200K
- o Warfighter & CINC Support provided modeling and simulation assessment to evaluate communications and related systems to support CINCs, and emerging C4ISR mission driven information requirements. $(1^{st}Qtr 4^{th}Qtr)$ \$600K

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Exhil	oit R-2	a, RDT&E P	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		GRAM ELEME Engineerin		ation/PE 0	302019К	 r name an g & Simula			
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	2.665	4.567	4.961					Contg	Contg

- o C3 Community Support provided DOD decision makers with a suite of modeling tools assessing DOD communication requirements interoperability and evaluating new communication technologies' capabilities. (1stQtr- 4thQtr) \$865K
- o Total 2.665M

FY2001 Plans:

- o DISA Program Support will (a) provide DISN performance assessments for existing and transitioning networks, applications, technology and develop recommendations for network performance improvement, survivability and reliability; (b) conduct end-to-end system performance assessment for DMS, IA, PKI, Provisioning 2000 (P2K) and DTS & (c) build new capability into models/tools to support assessments. (1stQtr 4thQtr) \$1,777K
- o Warfighter & CINC Support will (a) provide wartime performance and vulnerability assessments of the US Forces Korea communications infrastructure, and (b) develop a CINC network data collection tool to automate data collection for multiple communication modeling uses. ($1^{st}Qtr 4^{th}Qtr$) \$728K
- o C3 Community Support Modeling and Simulation (M&S) Tools will evaluate communication and related systems of military campaign outcomes by (a) ensuring availability of network models commensurate with the evolving DISN, (b) enhancing M&S capability to reflect the changing network technology development and incrementally building an integrated M&S tool based on COTS products, (c) supporting business case studies, (d) provide modeling support for the Joint Warfare System (JWARS) for design of "Blue" communication scenarios, and (g) providing continue configuration management support and verification and validation review of Network Warfare Simulation (NETWARS). (1stQtr 4thQtr) \$2,062K
- o Total 4.567M

Exhil	oit R-2a	, RDT&E Pı	roject Jus	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		RAM ELEME Engineering		ation/PE 0	302019К	 r name an g & Simula			
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	2.665	4.567	4.961					Contg	Contg

FY2002 Plans:

- o DISA Program Support will (a) continue DISN performance assessments for existing and transitioning networks, applications, technology and develop recommendations for network performance improvement, survivability and reliability, (b) conduct end-to-end system performance assessment for DMS, PKI, IA, DTS and GCCS, and (c) build new capability into models/tools to support these assessments. $(1^{st}Qtr 4^{th}Qtr)$ \$1,971K
- o Warfighter & CINC Support will provide: (a) wartime performance and vulnerability assessments of the DOD networks for the warfighting CINCs and (b) assessments of the impact of new technology programs on existing or planned DOD networks. (1^{st} Qtr 4^{th} Qtr) \$850K
- o C3 Community Support Modeling and Simulation (M&S) Tools will: (a) continue to enhance M&S capability to reflect the evolving DISN network, (b) continue development and incremental builds to an integrated M&S tool based on COTS products end-to-end, and (c) continue configuration management support and verification and validation review of NETWARS. (1^{st} Qtr 4^{th} Qtr) \$2,140K
- o Total 4.961M
- B. Other Program Funding Summary: 0&M Funding (\$M)

 $\begin{array}{ccc} \underline{FY2000} & \underline{FY2001} & \underline{FY2002} & \underline{To \ Complete} \\ 8.219 & 9.518 & \underline{10.591} & \underline{Contg} \end{array}$

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Exhi	bit R-2a	, RDT&E P	roject Ju	stificatio	on		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		FRAM ELEME Engineerin		ation/PE 0	302019К	 I NAME AN g & Simula			
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	2.665	4.567	4.961					Contg	Contg

C. Acquisition Strategy: Work will continue under existing contract vehicles.

D. Schedule Profile

- FY00 Support key DISA programs, such as DMS, DISN, PKI & GCCS, $1^{\rm st}$ Qtr $4^{\rm th}$ Qtr Identify key decision points by ensuring availability of network models, $1^{\rm st}$ Qtr $4^{\rm th}$ Qtr
- FY01 Support to the key DISA programs, especially integrated switching and transmission, 1st Qtr 4th Qtr
 Perform assessments of advanced technologies, such as Multicast and Multi-Protocol Label Switching, in support of
 new C2 initiatives, 1st Qtr 4th Qtr
 Enhance M&S capability to reflect the evolving DISN network, 1st Qtr 4th Qtr
 Support Joint Warfare System (JWARS), 1st Qtr 4th Qtr
- FY02 Continue to provide M&S support to the key DISA programs, 1st Qtr 4th Qtr Continue to provide M&S assessment to OSD, CINCs, JCS & Services, 1st Qtr 4th Qtr

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Exhibit R-3 Cost Anal	ysis										DATE: June 2001
APPROPRIATION/BUDGET RDT&E, Defense-Wide/07	ACTIVITY	PROGRAM E			gration/	PE 030	2019К		OJECT NAME deling & Sim		
Cost Category	Method	Performing Activity & Location	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost T		al Val	rget lue of ntract
Modeling & Simulation		MITRE, McLean, VA	.750	.200	4/01	0	N/A	N/A	.95	50 .9	50
		SAIC Arlington, Va.	1.057	1.332	3/01	1.490	3/02	Contg	g Con	itg 3.8	379
		Various Contracts	.858	3.035	Various	3.471	Various				
Subtotal Product Development			2.665	4.567		4.961					
Total Costs			2.665	4.567		4.961					
					Page 1	.3 of 1	3				

Exhib	it R-2, R	DT&E Budg	get Item J	tification		DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 RDT&E Long Haul Communications/PE								
COST (in millions)	FY00	FY01	FY02				Cost to Complete	Total Cost
Total Program Element (PE)	1.205	1.346	10.744				Contg	Contg
DISN Systems Engineering Support/T82	1.205	1.346	1.379				Contg	Contg
Information Dissemination Management/IM01	0	0	9.365*				Contg	Contg

- A. Mission Description and Budget Item Justification: This program element funds system engineering for the Defense Information Systems Network (DISN) which provides defense-wide communications for the day-to-day operations of the DOD and serves as the core of DOD wartime communications for the National Command Authority (NCA), the Joint Chiefs of Staff (JCS), the Commanders-in Chief (CINCs), and other critical users. It provides for the engineering to consolidate the operational communications networks into DISN. This PE funds the critical and essential engineering required to use commercial equipment and service offerings, to implement the rapidly advancing communications technology, and to update the network design tools so as to continue providing tremendous cost savings, and to continue offering valuable new cost effective information technology capabilities and services to customers. It provides for the cost-effective development of needed information technology capabilities by targeting RDT&E efforts to DOD mission needs. This PE supports the military requirements identified by Joint Mission Needs Statement (JMNS) and Joint Capstone Requirements Document (JCRD). The program element is under Budget Activity 07 because it involves efforts supporting operational systems development.
- * This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2002, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent Departmental guidance regarding Information Technology budgeting.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibit R-2, RDT&E Budget Item Justificat	DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	_	IOMENCLATURE	s/PE 0303126K
B. Program Change Summary:	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>
Previous President's Budget (FY 2001)	1.306	1.416	1.440
Appropriated Value	1.316	1.416	
Adjustments to Appropriated Value	111	070	
Adjustments to Budget Year since FY 2001 President's Budget	_		+9.304
Current Budget Submission/President's Budget (FY 2002)	1.205	1.346	10.744

Change Summary Explanation:

- FY 00 changes due to below threshold reprogramming.
- FY 01 decrease due to congressional rescission and below threshold reprogramming.
- FY 02 change is due primarily to Congressional direction concerning Departmental Information Technology budgeting guidance in that funding is being realigned from the O&M to the RDT&E appropriation.

DATE: June 2001 Exhibit R-2a, RDT&E Project Justification APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NAME AND NUMBER RDT&E, Defense-Wide/07 Long Haul Communications/PE 0303126K DISN Systems Engineering Support/T82 COST (in millions) FY00 FY01 FY02 Cost to Total Complete Cost Project Cost 1.205 1.346 1.379 Conta Conta

A. <u>Mission Description and Budget Item Justification</u>: This project funds the critical and essential engineering to continue providing cost savings and to offer valuable new cost-effective information technology capabilities and services to customers. It funds systems engineering to reduce the risks and delays of implementing new communications technologies by performing assessments and proof of concept implementations. It also provides engineering to develop/enhance computer-aided network topology design, analysis and modeling tools to: (a) improve performance and/or reduce cost of operational networks to satisfy customer requirements at lowest cost, (b) analyze/solve problems in operational networks and (c) produce cost-efficient designs for future networks using new technologies.

FY00 Accomplishments:

- o Engineer the insertion of technology into the DISN (e.g., wave division multiplexing, optical switching, and ATM cell encryption). (1^{st} Qtr -4^{th} Qtr; \$369K).
- o Engineering support for the Network Engineering Assessment Facility which provides the testbed for performing risk-reduction, integration assessments of enhanced network technologies and transitioning those capabilities into the DISN. ($1^{\rm st}$ Qtr $4^{\rm th}$ Qtr; \$198K).
- o Upgrade a portion of workstations, LAN, and WAN hardware & system software as requirements/technology dictate.

 Provides the information systems platform for operational and planned DISN voice, video, data and transport networks. (1st Qtr 4th Qtr; \$100K).
- o Develop network topology design algorithms, heuristics and software based on a government prioritized list of enhancements (e.g., specific DISN Service Delivery Nodes (SDN) and Edge devices) (1st Qtr 4th Qtr; \$538K).
- o Total \$1.205M

FY01 Plans:

o Engineer the insertion of advanced network technology into the DISN (e.g., wave division multiplexing, optical switching, ATM cell encryption, and gigabit/terabit routing) (1st Qtr - 4th Qtr; \$408K).

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Exhi	bit R-2a	, RDT&E P	roject Ju	stificatio	on		DATE: Ju	ne 2001	
						 r NAME AN stems Engi	D NUMBER neering Su	pport/T82	
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Project Cost	1.205	1.346	1.379					Contg	Contg

FY01 Plans (cont'd):

- o Engineering support for the Network Engineering Assessment Facility which provides the testbed for performing risk-reduction, integration assessments of enhanced network technologies and transitioning those capabilities into the DISN. (1^{st} Qtr 4^{th} Qtr; \$225K).
- o Upgrade a portion of workstations, LAN, and WAN hardware & system software as requirements/technology dictate.
- Provides the information systems platform for operational and planned DISN voice, video, data and transport networks. (1^{st} Qtr 4^{th} Qtr; \$100K).
- o Develop network topology design algorithms, heuristics and software based on a government prioritized list (1^{st} Qtr 4^{th} Qtr; \$613K).
- o Total \$1.346M

FY02 Plans:

- o Engineer the insertion of technology into the DISN (e.g., wave division multiplexing, optical switching, ATM cell encryption, and gigabit/terabit routing) (1^{st} Qtr -4^{th} Qtr; \$398K).
- o Engineering support for the Network Engineering Assessment Facility which provides the testbed for performing risk-reduction, integration assessments of enhanced network technologies and transitioning those capabilities into the DISN. (1st Otr 4th Otr; \$250K).
- o Upgrade a portion of workstations, LAN, and WAN hardware & system software as requirements/technology dictate.
 - Provides the information systems platform for operational and planned DISN voice, video, data and transport networks. (1st Qtr 4^{th} Qtr; \$100K).
- o Develop network topology design algorithms, heuristics and software based on a government prioritized list (1^{st} Qtr 4^{th} Qtr; \$631K).
- o Total \$1.379M

Exhi	bit	R-2a,	RDT&E Pr	roject Jus	stificatio	on			DATE: Ju	ne 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07								pport/T82			
COST (in millions)	F	Y00	FY01	FY02							Total Cost
Project Cost	1.2	205	1.346	1.379						Contg	Contg
B. Other Program Funding Sum	mary	<u>7</u> :	FY00	FY01	<u>FY02</u>	To Complete					

1.437

C. Acquisition Strategy: General Services Administration, Washington, DC; SETA Corporation, McLean, VA.

1.471

1.935

D. Schedule Profile:

FY00 4th Qtr

Operation & Maintenance

FY01 - FY02 4^{th} Qtr Future technology design, analysis, modeling tools, and technology insertion into the DISN (e.g.,

Future technology design, analysis, modeling tools, and technology insertion into the DISN (e.g., wavelength multiplexing, optical switching, ATM cell encryption, and gigabit/terabit routing).

Release #2 of ATM COTS computer-aided network topology design, analysis and modeling tool

Contg

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Exhibit R-3 Cost Analys	is									DATE: June 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 PROGRAM ELEMENT Long Haul Communications/PE 0303126K PROJECT NAME AND DISN Systems Engin										
Support Costs:										
		erforming ctivity & ocation	Total Pys <u>Cost</u>	FY01 Cost	FY01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total V	arget alue of <u>ontract</u>
Systems Engineering	CPAF/ M CPFF	ultiple	1.205	1.346	10/00	1.379	10/01	Contg	Contg	N/A

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Exhil	Exhibit R-2a, RDT&E Project Justification PROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NAME AND									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 PROGRAM ELEMENT Long Haul Communications/ PE 0303126K					26K	PROJEC'	01			
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Project Cost	0	0	9.365*						Contg	Contg

- A. Mission Description and Budget Item Justification: Information Dissemination Management (IDM) integrates government-off-the-shelf (GOTS) and commercial-off-the-shelf (COTS) advanced information management technology to provide Information Awareness, Access, Delivery Management, and Support services to C4ISR (surveillance and reconnaissance) systems to enhance their information dissemination performance. The goal is to provide the warfighter three critical capabilities: awareness of the existence of operationally relevant information, access to the relevant information, and delivery of relevant information in an authenticated, secure, and timely manner. The Core IDM Services are defined by the "Framework for Information Dissemination Management" document distributed by ASD (C3I) in April 1998 as Awareness, Access, Delivery, and Support and satisfy requirements described in the IDM Mission Needs Statement validated by the Joint Requirements Oversight Council (JROC) in July 1999, and the Capstone Requirements Document approved by the JROC in January 2001. The IDM Core Services are implemented as Defense Information Infrastructure Common Operating Environment (DII COE) compliant segments. Rather than being developed as a "system", IDM is being incrementally developed as tools and services that will be incorporated into and fielded as integral parts of other host systems. This RDT&E project continues the developmental efforts that produced Releases 1, 2 and 3, with the incremental development and integration of IDM tools and services via an evolving IDM Toolbox planned for FY02 and beyond.
- * This project is not a new start nor does it reflect unexpected program growth. Beginning in FY 2002, funding has been realigned from the O&M to the RDT&E appropriation due to Congressional (HAC) direction and subsequent departmental quidance regarding Information Technology budgeting.

FY 2002 Plans:

o Make the Awareness and Delivery capabilities of IDM (IDM A&D) available for fielding as a part of GCCS version 3.4 (1^{st} Qtr - 1^{st} Qtr; \$150K).

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DATE: June 2001 Exhibit R-2a, RDT&E Project Justification APPROPRIATION/BUDGET ACTIVITY PROGRAM ELEMENT PROJECT NAME AND NUMBER RDT&E, Defense-Wide/07 Long Haul Communications/ PE 0303126K Information Dissemination Management/IM01 COST (in millions) FY00 FY01 FY02 Cost to Total Complete Cost 0 0 9.365* Project Cost Conta Conta

- o Field IDM A&D broadly to operational units. Emphasis will be on fielding to CINC locations. (1^{st} Qtr 4^{th} Qtr; \$350K).
- o Integrate the Access 1 (A1) capability into IDM tools and services (1st Qtr 2nd Qtr; \$1,250K).
- o Begin the design and integration of the Operations Support (OPS) and Access 2 and Control (A2&C) capabilities of IDM (1st Otr 4^{th} Otr; \$2,719K).
- o Award competitive contract for continued incremental development of IDM tools and core services (1^{st} Qtr 3^{rd} Qtr; \$1,350K).
- o Begin the evolution of the IDM Toolbox $(3^{rd} Qtr 4^{th} Qtr; $3,546K)$.
- o Total \$9.365M
- B. Other Program Funding Summary:

Operation and Maintenance, DW $\frac{\text{FY00}}{3.647}$ $\frac{\text{FY01}}{5.529}$ $\frac{\text{FY02}}{0.608}$ $\frac{\text{To Complete}}{\text{Contg}}$

C. <u>Acquisition Strategy</u>: All RDT&E work will be contracted out or funded using MIPRs. Product Development (Evolving IDM Toolbox): Full and Open Small Business Competition; Management Support: MITRE, GSA Schedule; Test and Evaluation: Joint Interoperability Test Command (JITC).

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Exhil	Exhibit R-2a, RDT&E Project Justification											
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	·							PROJECT NAME AND NUMBER Information Dissemination Management/IM01				
COST (in millions)	FY(00	FY01	FY02						Cost to Complete	Total Cost	
Project Cost	(0	0	9.365*						Contg	Contg	

D. Schedule Profile:

FY 2002

- o IDM A&D incorporated into GCCS version 3.4 and installed at various CINCs
- o IDM Al integrated into available IDM tools and services
- o Award development contract for continued development and maintenance of IDM Toolbox

Exhibit R-3 Cost Anal	lysis									DATE: June 2001
APPROPRIATION/BUDGET RDT&E, Defense-Wide/07	T nication	ns/PE 0	303126K			PROJECT NAME AND NUMBER Information Dissemination Management/IM				
Cost Category	Method	Performing Activity & Location	Total PYs <u>Cost</u>	FY 01 Cost	FY 01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To Complete	Total	Target Value of Contract
Product Integration	C/CPAF	TBD	0	0	N/A	3.421	TBD	0	3.421	3.421
Product Development	C/CPAF	TBD	0	0	N/A	3.546	TBD	28.369	36.014	36.014
Management Support	Various	Various	0	0	N/A	1.850	Various	Contg	Contg	N/A
Test & Evaluation	MIPR	Various	0	0	N/A	0.548	Various	Contg	Contg	N/A
Totals						9.365				
						10 of 1	_			

Exhib:	Exhibit R-2, RDT&E Budget Item Justification												
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						R-1 ITEM NOMENCLATURE Support of the National Communications System/P.E. 0303127K						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost			
Total Program Element	3.373	4.235	4.968						Contg	Contg			
Enhanced Satellite Capability/N092	.822	0*	0						Contg	Contg			
Interoperability/N088	1.079	1.642	.989						Contg	Contg			
Information Assurance/N094	.050	0*	0						Contg	Contg			
Advanced Intelligent Network/N091	1.365	0*	0						Contg	Contg			
NS/EP Telecommunications Integration Support/N095	.057	0*	0						Contg	Contg			
NS/EP Programs/N709	0	2.593*	3.979						Contg	Contg			

A. Mission Description and Budget Item Justification:

This program element supports Executive Order 12472 of 3 April 1984 which assigns the National Communications System (NCS) the mission of assisting the President, the National Security Council, the Office of Science and Technology Policy, and the Office of Management and Budget in exercising their wartime and non-wartime telecommunications functions and responsibilities, and coordinating the planning for, and provisioning of, National Security and Emergency Preparedness (NS/EP) telecommunications for the federal government under all circumstances. To attain this objective, there are several National Security Decision Directives which require that initiatives be developed to improve the survivability and interoperability of the commercial telecommunications systems that support national security and emergency preparedness, to enhance the potential NS/EP functionality of U.S. commercial satellites, and to provide communications support for Government agencies which have responsibilities to carry out essential functions in any emergency. Interoperability supports the Federal Telecommunications Standards Program, and ensures interoperability

Exhibit R-2, RDT&E Budget Item Justification

DATE: June 2001

APPROPRIATION/BUDGET ACTIVITY

RDT&E, Defense-Wide/07

R-1 ITEM NOMENCLATURE

Support of the National Communications System/P.E. 0303127K

among emerging government communications systems. Effective FY 2001, NS/EP Programs develops and implements evolutionary NS/EP capabilities for an enduring and effective telecommunications infrastructure. It consolidates Enhanced Satellite Capability, Information Assurance, Advanced Intelligent Network and includes an evolutionary initiative called the Information Sharing and Analysis System (ISAS). Enhanced Satellite Capability explores evolving telecommunications technologies and applications and produces proof-of-concept solutions to satisfy current and future NS/EP needs, with emphasis on the investigation of potential wireless solutions for specialized NS/EP needs. Advanced Intelligent Network employs newly developed processing capabilities that tailor the extensive telecommunications resources of the Public Switched Network to enhance connectivity and survivability of services for essential government users during periods of emergency. The Information Sharing and Analysis System (ISAS) involves an industry-government sharing of information to help ensure reliable, restorable, and secure communications supporting National Security and Emergency Preparedness. This initiative is evolving from a manual process of collection and sharing of network outage information in the National Coordinating Center (NCC) to an automated process which includes a telecommunications ISAS. The NCC, which is a government/industry partnership, has been designated by the National Security Council as an Information Sharing and Analysis Center (ISAC) in accordance with the criteria of Presidential Decision Directive 63 and the National Plan for Information Systems Protection. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

* Effective FY 2001, Project N092 (Enhanced Satellite Capability), Project N094 (Information Assurance), Project N091 (Advanced Intelligent Network) and Project N095 (NS/EP Telecommunications Integration Support) were merged into Project N709 (NS/EP Programs).

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibit R-2, RDT&E Budget Item Justificat	DATE: June 2001		
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	R-1 ITEM NOME Support of the		unications System/P.E. 0303127K
B. Program Change Summary:			
Previous President's Budget (FY 2001) Appropriated Value Adjustments to Appropriated Value	FY2000 4.242 4.274 901	FY2001 5.019 5.019 784	<u>FY2002</u> 5.088
Adjustments to Budget Year Since FY 2001 President's Budget Current Budget Submit/President's Budget (FY 2002)	3.373	4.235	120 4.968
Change Summary Explanation:			
Funding: FY 2000 change due to below threshold reprogramming. FY 2001 adjustment is due to congressional rescission a FY 2002 change due to revised fiscal guidance.	and below thre	shold reprogr	ramming.

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DATE: June 20 Exhibit R-2a, RDT&E Project Justification										
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						PROJECT NAME AND NUMBER Interoperability/N088				
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Project Cost	1.079	1.642	.989						Contg	Contg

A. Mission Description & Budget Item Justification:

This project analyzes new communications technologies and their effects on interoperability, reliability, and security of government communications and conducts related technical evaluations and standards and implementation agreements; supports the Federal Telecommunications Standards Program; ensures interoperability among emerging government communication systems, including related information systems, by providing the required analyses to the NCS member organizations and other government agencies for specific types of communication and related information systems; and performs analyses to support priority treatment of NS/EP communications in commercial networks, including the Internet and wireless systems.

FY2000 Accomplishments:

- o Continued to develop technology, methods, and strategies to help ensure reliability of NS/EP communications through congested networks, with emphasis on emerging Internet, wireless, and ATM technologies. (\$488K) $(1^{st}$ Otr 4^{th} Otr)
- o Continued to develop procedures for analyzing interoperability and reliability of NS/EP communications in various stress scenarios and with various information formats. (e.g. voice, video, messaging, conferencing). (\$341K) (1st Otr 4th Otr)
- o Continued to assess, evaluate, and extend advanced wireless communications technology and service for NS/EP communications. (\$250K) (1^{st} Otr 4^{th} Otr)
- o Total \$1.079M

FY2001 Plans:

o Continue to develop technology, methods, and strategies to support development of industry standards and implementation agreements incorporating specific features to help ensure reliability of NS/EP communications through congested networks. (\$350K) (1^{st} Qtr - 4^{th} Qtr)

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Exhi	Exhibit R-2a, RDT&E Project Justification										
							PROJECT NAME AND NUMBER Interoperability/N088				
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Project Cost	1.079	1.642	.989						Contg	Contg	

- o Continue to develop procedures for analyzing interoperability of NS/EP communications and related information systems in various stress scenarios. (\$390K) (1^{st} Qtr 4^{th} Qtr)
- o Assess advanced, emerging technology for its use by or impact on security and reliability of NS/EP communications (e.g., photonic switching). (\$571K) (1^{st} Qtr 4^{th} Qtr)
- o Continue to assess, evaluate, and extend advanced wireless communications technology and services for NS/EP communications. (\$331K) (1^{st} Qtr -4^{th} Qtr)
- o Total \$1.642M

FY2002 Plans:

- o Continue analyzing technology underlying emerging communications (e.g., Internet) to develop methods of inserting features into networks to support priority service for NS/EP communications. (\$589K) (\$184 Otr \$48 Otr)
- o Continue analyzing emerging wireless and other significantly capacity-limited technologies to develop ways of obtaining NS/EP priority treatment in public networks. (\$400K) (1^{st} Qtr 4^{th} Qtr)
- o Total \$.989M

B. Other Program Funding Summary:

				То	Total
	FY2000	FY2001	FY2002	Complete	Cost
O&M,DW	3.236	2.134	2.033	Contg	Contg

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Exhibit R-2a, RDT&E Project Justification									DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		GRAM ELEME Fort of the		03127к		PROJECT NAME AND NUMBER Interoperability/N088						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost		
Project Cost	1.079	1.642	.989						Contg	Contg		

C. Acquisition Strategy:

Work will continue under existing contract vehicles and new reimbursable orders.

D. Schedule Profile

FY00 - $4^{\rm th}$ quarter: Receive reports and assessments of emerging technology (e.g., Internet, wireless for NS/EP

applications that provide rationale for special NS/EP features in commercial networks.

FY01 - 4^{th} quarter: Receive reports that begin to define the expected technology of Next Generation Networks. FY02 - 4^{th} quarter: Receive reports on strategies for mitigating impact of congestion on NS/EP communications

in high-speed networks (e.g., priority services, intelligent network rerouting in emerging

integrated, packet-based, commercial networks).

Exhibit R-3 Cost Anal	ysis										DATE: June 2001
APPROPRIATION/BUDGET RDT&E, Defense-Wide/07	ACTIVITY	PROGRAM EL Support of		S/PE 03	303127К				ECT NAME operabili		· · · · · · · · · · · · · · · · · · ·
Cost Category	Contract Method <u>& Type</u>	Performing Activity & Location	Total PY's <u>Cost</u>	FY01 <u>Cost</u>	FY01 Award <u>Date</u>	FY02 Cost	FY02 Award <u>Date</u>	Cost to Complete	Total <u>Cost</u>	Targe Value <u>Contr</u>	e of
Technical Support	FFRDC/ Mipr	Mitre McLean, Va	.400	.210	10/00	TBD		0	.610	.610	
Technical Support	RO	NTIA Boulder, CO	0	.531	10/00	.405	10/01	3.000	3.936	3.936	
Technical Support	CPFF/ C	SW Research Kelly AFB, Tex	.200	.206	06/01	.119	12/01	Contg	Contg	.525	
Technical Support	RO	NIST Gaithersburg, MD	.179	.190	04/01	.129	02/02	Contg	Contg	. 498	
Technical Support	FFP/ C	SAIC San Diego, CA	.100	.100	TBD	.188	12/01	Contg	Contg	.388	
Technical Support	FFP	Gartner Group Stanford, CT	0	.305	01/01	TBD			TBD	TBD	
Subtotal Support Costs			. 879	1.542		.841					
Report Development	CPAF/ 8(a)	Comtec Herndon, VA	.200	.100	02/01	.148	08/02	1.050	1.498	1.498	
Subtotal Product Development			.200	.100		.148					
Total Cost			1.079	1.642		.989					
					Page 7	of 11					

Exhi	DATE: June 2001									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		OGRAM ELEME port of the		03127к	PROJECT NAME AND NUMBER NS/EP Programs/N709					
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost	
Project Cost	0	2.593	3.979					Contg	Contg	

A. Mission Description & Budget Item Justification:

This project is required to employ newly developed processing capabilities to tailor the extensive telecommunications resources of the existing Public Switched Network (PSN), which includes the Local Exchange Carrier (LEC) and Inter Exchange Carrier (IEC) networks, thus enhancing connectivity and survivability of services for essential government users during periods of emergency. Advanced Intelligent Network (AIN) is an evolving PSN capability consisting of signaling systems, switches, computer processing, databases, and transmission media. This research will result in the utilization of these components, in a customized set of network services that can be flexibly, rapidly, and cost effectively configured by customers upon request. Enhanced Satellite Capability explores evolving telecommunications technologies and applications and produces proof-of-concept solutions to satisfy current and future NS/EP needs, with emphasis on the investigation of potential wireless solutions for specialized NS/EP needs. Information Sharing and Analysis System initiatives will develop and evolve a telecommunications Information Sharing and Analysis System (ISAS) for the National Coordinating Center (NCC), providing a means for industry and government to share information relating to the security of the nation's critical telecommunications infrastructure. In addition, ISAS tasking will develop modeling and analysis tools used in the Network Design and Analysis Center (NDAC) System.

FY2000 Accomplishments:

o Effort previously funded under Projects N092, N091, and N095.

FY2001 Plans:

- o Evaluate AIN capabilities and implementation for NS/EP. (\$300K) (1^{st} Qtr 4^{th} Qtr)
- o Assess Wireless Priority Services across cellular and satellite systems. (\$511K) (1st Qtr 4th Qtr)
- o Define, develop, demonstrate and test NS/EP techniques and features for NS/EP enhancements. (\$450K) (1^{st} Qtr 4^{th} Qtr)
- o Develop future service plans for Government Emergency Telecommunications Service (GETS) full operational capability. (\$488K) (1^{st} Qtr 4^{th} Qtr)

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Exhibit R-2a, RDT&E Project Justification										DATE: June 2001			
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07			RAM ELEME ort of the		03127К		PROJECT NAME AND NUMBER NS/EP Programs/N709						
COST (in millions)	F	Y00	FY01	FY02						Cost to Complete	Total Cost		
Project Cost		0	2.593	3.979						Contg	Contg		

- o Integrate enhancements, including NS/EP priorities and security, into current NCS Programs. (\$844K) (1^{st} Qtr 4^{th} Qtr)
- o Total \$2.593M

FY2002 Plans:

- o Develop proof-of-concept hardware and software to demonstrate potential solutions for specialized NS/EP needs. (\$135K) $(1^{st}$ Otr 4^{th} Otr)
- o Explore emerging telecommunications technologies for applications that will enhance National Security and Emergency Preparedness (NS/EP). Also define, develop, demonstrate and test such enhancements. (\$800K) (1st Qtr 4th Qtr)
- o Evaluate potential enhancements to the Information Sharing and Analysis System (ISAS) that is used to share industry government information in support of NS/EP using the development of modeling and analysis tools. (\$200K) (1st Qtr 4th Qtr)
- o Evaluate the security needs and vulnerabilities on National telecommunication networks that are needed for NS/EP applications for networks' protection. (\$200K) (1^{st} Qtr 4^{th} Qtr)
- o Evaluate the potential for Government Emergency Telecommunications Service (GETS) enhancements in light of Advanced Intelligent Network (AIN) developments to improve GETS performance. (\$204K) (1^{st} Qtr -4^{th} Qtr)
- o Develop analyses of technology and techniques to evolve the ISAS from emphasis on switched circuits to include multiple technologies, such as data, wireless, new transmission media and methods, network access, and Internet services. (\$480K) (1^{st} Qtr 4^{th} Qtr)
- o Develop techniques and methods of analyzing, demonstrating, and testing security systems for the ISAS. (\$1,280K) $(1^{\text{st}} \text{Qtr} 4^{\text{th}} \text{Qtr})$
- o Develop techniques and tools for correlating and analyzing data, including testing and evaluating commercial off-the-shelf tools in the ISAS environment to improve correlation of events to identify network attacks, to more rapidly analyze events and predict effects on networks. (\$680K) (1st Qtr 4th Qtr)
- o Total \$3.979M

Exhi	Exhibit R-2a, RDT&E Project Justification											
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	l l		RAM ELEME ort of the	NT NCS/PE 03	03127К		PROJECT NAME AND NUMBER NS/EP Programs/N709					
COST (in millions)	FYC	00	FY01	FY02						Cost to Complete	Total Cost	
Project Cost	0	0	2.593	3.979						Contg	Contg	

Other Program Funding Summary:

FY2000 FY2001 FY2002 $\overline{31.850}$ $2\overline{4.634}$ $\overline{21.454}$ M&O

C. Acquisition Strategy: Work will continue under current and re-competed contract vehicles, to include systems engineering and technical support (SETA), Federally Funded Research and Development Centers (FFRDCs), industrial firms, and small businesses.

D. Schedule Profile:

 $4^{\rm th}$ quarter: GETS (with NS/EP functionality) reaches full operational capability. FY01

FY02 $4^{\rm th}$ quarter: NS/EP integration/implementation into wireless systems.

Receive reports on current, state-of-the art techniques to include collection, storage, analysis and dissemination of information involving anomalous events in the Internet and other networks. Receive reports on the inclusion of new network transmission systems in ISAS data collection and

analysis.

Receive reports on including mobile wireless and other network access technologies in ISAS

data collection and analysis.

Receive reports on advanced methods of data analysis, including statistical analysis and "data mining." (Includes evaluation of tests of commercial off-the-shelf software and hardware). Receive reports on analyses of security vulnerabilities and their fixes for data acquisition.

storage, and dissemination.

Page 10 of 11

Exhibit R-3 Cost Anal	ysis									DATE: June 2001	
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07 RDT&E Defense-Wide/07 RDT&E Defense-Wide/07				0303127К				ROJECT NA S/EP Progr		= = =	
Cost Category	Contract Method <u>& Type</u>	Performing Activity & <u>Location</u>	Total PY's <u>Cost</u>	FY01 <u>Cost</u>	FY01 Award <u>Date</u>	FY02 Cost	FY02 Award <u>Date</u>	Cost to	Total <u>Cost</u>	Target Value of <u>Contract</u>	
Technical Assistance	CPAF/ C	BAH McLean, VA	0	.300	Various	1.253	Variou	s Contg	Contg	1.553	
Technical Assistance	FFRDC/ Mipr	Mitre McLean, Va	0	.844	04/01	.844	04/02	2 Contg	Contg	1.688	
Technical Assistance	8a	TBD	0	0	N/A	.600	12/01	Contg	Contg	.600	
Technical Assistance	CPAF	Dyncorp		.224	04/01	.296	04/02	2 Contg	Contg	.520	
Subtotal Support Costs		Chantilly, Va	0	1.368		2.993					
Technical Reports	CPFF/ SS	Telcordia Morristown, NJ	0	.938	03/01	.686	03/02	2 Contg	Contg	1.624	
Technical Reports	RO	JPL Pasadena, CA	0	.287	06/01	.300	03/02	. Contg	Contg	.587	
Subtotal Product Development			0	1.225		.986					
Total Cost			0	2.593		3.979					
				Page 1	l of 11						

Exhib:	Exhibit R-2, RDT&E Budget Item Justification									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		R-1 ITEM NO Minimum Esse			unications	Network/PE	0303131К			
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Total Program Element (PE)	4.660	7.223	6.988						Contg	Contg
Strategic C3 Support/T70	2.569	2.422	2.588						Contg	Contg
Special Projects/T64	2.091	4.801	4.400						Contg	Contg

A. Mission Description and Budget Item Justification: This PE performs work to support DISA's role as the Nuclear Command, Control, and Communications (NC3) system engineer in four major areas: (1) communications planning, (2) testing and assessment, (3) interoperability engineering, and (4) development of concepts of operation and architectures. The NC3 system is composed of C3 assets that provide connectivity from the National Command Authorities (NCA) through the National Military Command System (NMCS) to nuclear execution forces integral to fighting a "homeland-to-homeland," as well as theater, nuclear war. This MEECN includes the emergency action message (EAM) dissemination systems and those systems used for tactical warning/attack assessment (TW/AA), conferencing, force report back, re-targeting, force management and requests for permission to use nuclear weapons. Supporting efforts assure positive control of nuclear forces and connectivity between the National Command Authority (NCA) and strategic and theater forces. Efforts assure an informed decision-making linkage between the NCA and the Commanders-in-Chief (CINCs) of the Unified and Specified Commands. Additionally, through this PE, DISA provides direct and specialized support to ASD(C3I) and the Joint Staff (JS) and recommends support or non-support for NC3 programs as well as fail safe-procedures and risk reduction actions. This program element is under Budget Activity 07 because it involves efforts supporting operational systems development.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

			DATE: June 2001
Exhibit R-2, RDT&E Budget Item Justifica	tion		
	R-1 ITEM NOM		•
DT&E, Defense-Wide/07	Minimum Essent	cial Emergency Co	ommunications Network/PE 030313
		_	
. <u>Program Change Summary</u> Previous President's Budget (FY 2001)	FY00 5.2		$\frac{\text{FY02}}{7.252}$
Appropriated Value	3.79		7.252
Adjustments to Appropriated Value	.80		
Adjustments to Budget Years Since FY 2001 President's Budget		• • • • • • • • • • • • • • • • • • • •	264
Current Budget Submit/President's Budget (FY 2002)	4.60	7.223	6.988
FY00 change due to below threshold reprogramming. FY01 adjustment due to congressional rescission and FY02 reduction due to revised fiscal guidance.	below thresh	nold reprogramm	ning.
Page 2 of	Q		

Exh	DATE: June 2001										
APPROPRIATION/BUDGET ACTIVIT RDT&E, Defense-Wide/07	Min	GRAM ELEME imum Essent vork (MEECN	ial Emerge	-	ications	PROJECT NAME AND NUMBER Strategic C3 Support/T70					
COST (in millions)	FY00	FY01 FY02							Cost to Complete	Total Cost	
Project Cost	2.569	2.422	2.588						Contg	Contg	

A. <u>Mission Description & Budget Item Justification</u>: This project has three elements: Systems Analysis, Operational Assessments, and Systems Engineering. Together, these elements perform the mission of the NC3 systems engineer and provides NCA and Nuclear C3 support for ASD(C3I) and the Joint Staff.

The first element, Systems Analysis supports long-range planning and vulnerability assessments to ensure the NC3 system is adequate under all conditions of stress or war. This element analyzes the Nuclear Command and Control System (NCCS), i.e., strengths and weaknesses and recommends investment strategies to evolve the NCCS to achieve desired capabilities. Nuclear threats to include terrorist activities, both regional and global, are analyzed in special reports for ASD(C3I) and the Joint Staff.

The second element is Operational Assessments of fielded C3 systems and weapon platforms. These assessments are the sole means for positive verification of communications plans, procedures, operation orders, training, equipment and end-to-end system configuration. Assessments include strategic and theater, and national level C3 interfaces into the NC3 system. DISA conducts tests in an operational setting with the Joint Staff, CINCs and nuclear forces worldwide.

The third element is Systems Engineering which provides the Senior Leaders Communications System with technical and management advice, planning support, systems engineering, and Test & Evaluation (T&E). Leading edge C4I technology is assessed for all communication platforms supporting Executive Travelers/Senior Leaders to include the interoperability of hardware and operational procedures. This element supports DoD and NCA aircraft, i.e., Air Force One and the National Airborne Operations Center (NAOC).

Exh	DATE: June 2001									
					PROJEC Strateg					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Project Cost	2.569	2.422	2.588						Contg	Contg

FY 2000 Accomplishments:

- o Continued NC3 operational assessments/positive command and control, and Y2K support (1st Qtr 4th Qtr; \$1,301K)
- o Continued NC3 strategic planning, analysis and special reports (1st Qtr 4th Qtr; \$525K)
- o Continued NC3 systems engineering, Senior Leader Communications System (SLCS) (1st Qtr 4th Qtr; \$743K)
- o Total \$2.569M

FY 2001 Plans:

- o Continue NC3 operational assessments/positive command and control (1st Qtr 4th Qtr; \$1,293K)
- o Continue NC3 strategic planning and analysis and special reports (1st Qtr 4th Qtr; \$525K)
- o Continue NC3 systems engineering, Senior Leader Communications System (SLCS) (1st Qtr 4th Qtr; \$604K)
- o Total \$2.422M

FY 2002 Plans:

- o Continue NC3 operational assessments/positive command and control (1st Qtr 4th Qtr; \$1,320K)
- o Continue NC3 strategic planning and analysis and special reports (1st Qtr 4th Qtr; \$600K)
- o Continue NC3 systems engineering, Senior Leader Communications System (SLCS) (1st Qtr 4th Qtr; \$668K)
- o Total \$2.588M
- B. Other Program Funding Summary: FY00 FY01 FY02 Operations and Maintenance: 1.289 1.481 1.431

Page 4 of 8

Exh	Exhibit R-2a, RDT&E Project Justification									
						r NAME AN ic C3 Supp				
COST (in millions)	FY00	FY01 FY02							Cost to Complete	Total Cost
Project Cost	2.569	2.422	2.588						Contg	Contg

- C. <u>Acquisition Strategy:</u> Raytheon, Arlington, VA; Science Applications International Corporation (SAIC), McLean, VA; Booz-Allen Hamilton, Inc.; McLean, VA.; General Services Administration, Washington, D.C.
- D. Schedule Profile: Events cited below are recurring events for each fiscal year (2000-2002).
- 1st Otr Conduct Strategic Mobile Command Center Operation Order for Joint Staff (JS).
- 1st Otr Plan/Conduct Strategic and Theater Communications Assessment (Polo Hat) for JS.
- 1st Qtr Conduct JS/CINC Staff Assistance Exercise (CINCSPACE, CINCSTRAT, National Airborne Operation Center).
- 1st Otr Provide ASD(C3I) NC3 Review Report.
- 1st Qtr Assist in NCA and Nuclear C3 Aircraft modernization and overhaul.
- 2nd Otr Provide NC3 Systems Engineer Annual Report to ASD(C3I).
- 2nd Otr Conduct JS/CINC Staff Assistance Exercise (CINCPAC).
- 2nd Qtr Plan/Conduct Strategic and Theater Communications Assessment (Polo Hat) for JS.
- 2nd Otr Provide Non-Strategic Communications Evaluation (CINCEUR).
- 2nd Otr Assist in NCA and Nuclear C3 Aircraft modernization and overhaul.
- 3rd Qtr Plan/Conduct Strategic and Theater Communications Assessment (Polo Hat) for JS.
- 3rd Otr Update Emergency Communications Procedures CJCS, Emergency Action Procedures (EAP) Vol. 7 for JS.
- 3rd Otr Assist in NCA and Nuclear C3 Aircraft modernization and overhaul.
- 4th Otr Plan/Conduct Strategic and Theater Communications Assessment (Polo Hat) for JS.
- 4th Otr Update National Military Command System (NMCS)/DOD Emergency Communications Plan for JS.
- 4th Otr Assist in NCA and Nuclear C3 Aircraft modernization and overhaul.

sis									DATE	: June 2001
CTIVITY	Minimum Es	Minimum Essential Emergency Communications Strategic C3 Suppor								
Method /	Activity &	Total PYs <u>Cost</u>	FY 01 Cost	FY01 Award <u>Date</u>	FY 02 Cost	FY 02 Award <u>Date</u>	Cost To	o Total	Value of	
CPAF I	Performing	2.569	2.422	12/00	2.588	12/01	Contg.	Contg.	N/A	
				Page	6 of 8					
	CTIVITY Contract F Method A & Type L SS/C M CPAF F CPFF A	CTIVITY PROGRAM I Minimum Es Network (I) Contract Performing Method Activity & Location SS/C Multiple CPAF Performing CPFF Activities	CTIVITY PROGRAM ELEMENT Minimum Essentia Network (MEECN)/ Contract Performing Total Method Activity & PYs & Type Location Cost SS/C Multiple 2.569 CPAF Performing CPFF Activities	CTIVITY PROGRAM ELEMENT Minimum Essential Emergone Network (MEECN)/PE 0303 Contract Performing Total Method Activity & PYs FY 01 & Type Location Cost Cost SS/C Multiple 2.569 2.422 CPAF Performing CPFF Activities	CTIVITY PROGRAM ELEMENT Minimum Essential Emergency Cook Network (MEECN)/PE 0303131K Contract Performing Total FY01 Method Activity & PYs FY 01 Award & Type Location Cost Cost Date SS/C Multiple 2.569 2.422 12/00 CPAF Performing CPFF Activities MIPR	CTIVITY PROGRAM ELEMENT Minimum Essential Emergency Communic Network (MEECN)/PE 0303131K Contract Performing Total FY01 Method Activity & PYs FY 01 Award FY 02 & Type Location Cost Cost Date Cost SS/C Multiple 2.569 2.422 12/00 2.588 CPAF Performing CPFF Activities MIPR	CTIVITY PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/PE 0303131K Contract Performing Total FY01 FY 02 Method Activity & PYs FY 01 Award FY 02 Award & Type Location Cost Cost Date Cost Date SS/C Multiple 2.569 2.422 12/00 2.588 12/01 CPAF Performing CPFF Activities	CTIVITY PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/PE 0303131K Contract Performing Total FY01 FY 02 Method Activity & PYs FY 01 Award FY 02 Award Cost T. & Type Location Cost Cost Date Cost Date Complement CPAF Performing CPAF Performing CPFF Activities MIPR PROGRAM ELEMENT Minimum Essential Emergency Communications Str. PROGRAM ELEMENT MIPR PROGRAM ELEMENT Minimum Essential Emergency Communications Str. PROGRAM ELEMENT MIPR PROGRAM ELEMENT MIPR PROGRAM ELEMENT MIPR Str. PROGRAM ELEMENT MIPR PROGRAM MIPR PROGRAM ELEMENT MIPR PROGRAM MIPR PROGRAM ELEMENT MIPR PROGRAM MIPR PROGRAM ELEMENT MIPR PROGRAM ELEMENT MIPR PROGRAM ELEME	CTIVITY PROGRAM ELEMENT Minimum Essential Emergency Communications Strategic C3 Suppose	CTIVITY PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/PE 0303131K Contract Performing Total FY01 FY 02 Target Method Activity & PYs FY 01 Award FY 02 Award Cost To Total Value of & Type Location Cost Cost Date Cost Date Complete Cost Contract SS/C Multiple 2.569 2.422 12/00 2.588 12/01 Contg. Contg. N/A CPAF Performing CPFF Activities MIPR

Exh	DATE: June 2001									
					PROJEC' Special					
COST (in millions)	FY00	FY01	FY02			·			Cost to Complete	Total Cost
Project Cost	2.091	4.801	4.400						Contg	Contg

- A. <u>Mission Description & Budget Item Justification</u>: The mission is performing classified work. All aspects of this project are classified and require special access. Detailed information on this project is not contained in this document.
- B. Other Program Funding Summary: N/A.
- C. Acquisition Summary: Information requires special access.
- D. Schedule Profile: Information requires special access.

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Exhibit R-3 Cost Analy	rsis									DATE: June 2001
APPROPRIATION/BUDGET ARDT&E, Defense-Wide/07	CTIVITY	PROGRAM ELEMENT Minimum Essential Emergency Communications Network (MEECN)/PE 0303131K PROJECT NAME AND Special Projects/T6								
Support Costs										
Cost Category	Contract I Method / & Type L	Performing Activity & <u>ocation</u>	Total PYs <u>Cost</u>	FY 01 Cost	FY01 Award <u>Date</u>	FY 02 Cost	FY02 Award <u>Date</u>	Cost To Complete	Total	Total Value of <u>Contract</u>
Systems Engineering	CPAF F	Multiple Performing Activities	2.091	4.801	06/01	4.400	06/02	Contg.	Contg.	N/A
					Page	8 of 8				

DATE: June 2001 Exhibit R-2, RDT&E Budget Item Justification APPROPRIATION/BUDGET ACTIVITY R-1 ITEM NOMENCLATURE RDT&E, Defense-Wide/07 C4I for the Warrior/PE 0303149K COST (in millions) FY00 FY01 FY02 Cost to Total Complete Cost Ω Total Program Element (PE) .250 .401 0 .651 C4 Interoperability .250 .401 Ω Ω .651 Assessment/T50

A. Mission Description and Budget Item Justification:

This program element is the Chairman of the Joint Chiefs of Staff (CJCS) initiative promoting joint and coalition interoperability per DoD Directive 4630.5, DoD Instruction 4630.8. CJCS Instruction 6212.12 directs DISA to assess CINC, Service, and Agency C4 requirement documents (Mission Need Statements, Operational Requirement Documents, Test & Evaluation Management Plans, C4I Support Plans) for interoperability, compatibility, and integration. A recommendation is then forwarded to the Joint Staff for interoperability certification. The assessment process depends on automation to expedite, manage, and track requirement documents under review. The development of automated tools includes on-line web enabled database repository, collaborative coordination for assessors, and a suspense tracking capability. This program support is being terminated, effective end of fiscal year 2001, in order to transfer funding to a higher priority initiative, National Military Command System (NMCS) Support/PE 0302016K. This program element is under Budget Activity 07 because it involves effort supporting operational systems development.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

FY00 Accomplishments:

- o Prototype, install, integrate, and beta test Levels of Information System Interoperability (LISI) and supplemental automated tools with Joint C4 Program Assessment Tool. (1st Otr 4th Otr; \$250K).
- o Total \$.250M

Page 1 of 3

Exhibit R-2, RDT&E Budget Item Justification

APPROPRIATION/BUDGET ACTIVITY

RDT&E, Defense-Wide/07

R-1 ITEM NOMENCLATURE

C4I for the Warrior/PE 0303149K

DATE: June 2001

FY01 Plans:

- o Complete development, test and integration of assessment software suite to support on-line build of C4I Support Plans and Joint Requirements Oversight Council (JROC) submissions. (1st Qtr 4th Qtr; \$401K).
- o Total \$.401M

B. Program Change Summary:	FY00	FY01	FY02
Previous President's Budget (FY 2001)	.385	.405	.410
Appropriated Value	.388	.405	
Adjustments to Appropriated Value	138	004	
Adjustments to Pudget Vear sings EV 2001 Dresident's Budget			_ /110

Adjustments to Budget Year since FY 2001 President's Budget -.410
Current Budget Submit/President's Budget (FY 2002) .250 .401 0

Change Summary Explanation:

FY00 change due to below threshold reprogramming.

FY01 decrease due to congressional recission.

FY02 change reflects offset to fund higher priority initiatives.

C. Other Program Funding Summary: FY00 Operation and Maintenance: $\frac{FY00}{.405}$ $\frac{FY01}{.488}$

D. Acquisition Strategy:

Work is tasked via a contract with Femme Comp Inc, a woman owned small business. The cost plus fixed fee contract was competitively awarded. Tasking is done through defined task orders, providing staffing flexibility as requirements increase and decrease. Contractual progress is measured and evaluated through monthly reviews of schedule, status reports, deliverables and burn rates by the project manager and contracting officer's technical representative.

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Exhibit R-2, RDT&E Budget Item Justification

APPROPRIATION/BUDGET ACTIVITY
RDT&E, Defense-Wide/07

R-1 ITEM NOMENCLATURE
C4I for the Warrior/PE 0303149K

E. Schedule Profile:

FY00 4th Qtr LISI Integration with Joint C4 Software Assessment Tool FY01 4th Qtr Interactive on-line build of C4I Support Plan

Page 3 of 3

Exhibi	DATE: June 2001										
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						<pre>R-1 ITEM NOMENCLATURE Joint Spectrum Center (JSC)/PE 0303153K</pre>					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Joint Spectrum Center (JS1)	8.357	8.198	8.849						Contg	Contg	

A. Mission Description and Budget Item Justification: The Joint Spectrum Center's (JSC) mission is to ensure the Department of Defense's effective use of the electromagnetic spectrum in support of national security and military objectives. The JSC serves as the DOD center of excellence for electromagnetic (EM) spectrum management matters in support of the Unified Commands, Joint Staff, Assistant Secretary of Defense for Command, Control, Communications and Intelligence (ASD (C3I)), Military Departments, and Defense Agencies. The JSC supports the Electronic Protect missions of Information Warfare (IW) as they relate to spectrum supremacy. It is responsible for developing and maintaining DOD standard information systems that support DoD spectrum related activities and processes. Specifically, the Center designs, develops, and maintains DOD automated spectrum management systems, evaluation tools, and databases employed by the Unified Commands, Military Departments, and Defense Agencies. The JSC databases are the prime sources of information for DOD use of the EM spectrum. The JSC provides technical assistance to the Office of Assistant Secretary of Defense (OASD) C3I, the Joint Staff, DOD activities and the Unified Commands in support of spectrum policy decisions and ensuring the development, acquisition, and operational deployment of systems that are compatible with other spectrum dependent systems operating within the same electromagnetic environment. The Center is the DOD focal point for technical spectrum related support, Electromagnetic Environmental Effects (E³), and EM interference resolution assistance to operational units including deployable support to CINC Joint Task Forces. The JSC mission is integral to other vital activities such as Information Operations (IO), Command and Control (C2) Protect and other defensive IW activities as directed by the Joint Staff. This program element is under Budget Activity 07 because it supports operational systems development.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

Exhib:	it R-2, R	DT&E Budg	ret Item J	Tustificat	ion			DATE: June 2001				
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07	7					NOMENCLA		PE 0303153	K			
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost		
Joint Spectrum Center (JS1)	8.357	8.198	8.849						Contg	Contg		
o Developed/maintained worldwide deployment system, SPECTRUM XXI o Managed the DoD E3 F to support operation electromagnetic envi o Total \$8.357M FY 2001 Plans: o Provide Spectrum Tecand Services to according to the provide of the provide and Services to according to the provide of the provide and databases o Manage DoD E3 Programments	of the rogram tal force ronments hnical/Amplish sf Spectrum includ	DoD stand o include evaluati to ordna nalytical tudies re um XXI an ing devel	ard spect developm on of pot nce Support quired as d continu opment of	rum manage ent of an entially de to OASD(C) a result e to impre	analytic nazardous 3I)/Joint of WRC 20 ove analyte	ormation tool Staff/OS. 000 tic tools quisition	(AM (1 st Qtr -	4 th Qtr \$3.9 4 th Qtr \$3.3 4 th Qtr \$1. 4 th Qtr \$5.	116M) 432M)		
guidance and trainin electromagnetic radi o Total \$8.198M	_			operation	nal nazaro	is of	(1 st Qtr -	4 th Qtr \$1.	614M)		
			I	Page 2 of	5							

Exhib	it R-2, R	DT&E Budg	ion	ne 2001					
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						NOMENCLA ectrum Cent			
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Joint Spectrum Center (JS1)	8.357	8.198	8.849					Contg	Contg

FY 2002 Plans:

o Provide Spectrum Technical/Analytical Support to OASD(C3I)/Joint Staff/OSAM/Services in preparation for WRC 2003.

o Continue Spectrum Management Information Systems development

 $(1^{\rm st} \ {\rm Qtr} - 4^{\rm th} \ {\rm Qtr}; \ \$1.545M)$ $(1^{\rm st} \ {\rm Qtr} - 4^{\rm th} \ {\rm Qtr}; \ \$5.560M)$

o Manage DoD E3 Program with increased support to DOT&E in evaluation of Acquisition Category (ACAT) 1 system E3 tests.
o Total \$8.849M

 $(1^{st} Qtr - 4^{th} Qtr; $1.744M)$

B. Program Change Summary:

	FY 2000	FY 2001	FY 2002
Previous President's Budget (FY 2001)	8.757	8.735	9.241
Appropriated Value	8.823	8.735	
Adjustments to Appropriated Value	466	537	
Adjustments to Budget Year Since FY 2001 President's Budget			392
Current Budget Submit/President's Budget (FY 2002)	8.357	8.198	8.849

Change Summary Explanation:

FY 2000 change is due to below threshold reprogramming.

FY 2001 reduction is due to below threshold reprogramming and congressional rescission.

FY 2002 adjustment is due to revised fiscal guidance.

Page 3 of 5

Exhib		DATE: June 2001							
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07					NOMENCLA ectrum Cent	-	PE 0303153F		
COST (in millions)	FY00	FY01	FY02					Cost to Complete	Total Cost
Joint Spectrum Center (JS1)	8.357	8.198	8.849					Contg	Contg

C. Other Program Funding Summary:

- D. <u>Acquisition Strategy</u>: Engineering support services for the JSC are provided by contract. No in-house government capability exists, nor is it practical to develop one that can provide the expertise necessary to fulfill the mission and responsibilities of the JSC. The period of the previous cost plus award fee contract ended 30 September 2000. Full and open competition was used for the acquisition of a follow-on contract that became effective 24 August 2000 with a basic period of two years and three one year options.
- E. Schedule Profile:

		FY2000			00	F	01		FY2	200)2	
		1	2	3	4	1	2 3	4	1	2	3	4
Commerce	Business Notice New Contract	X										
Contract	Award				Χ							
Contract	Performance Begins				Χ							
Exercise	Option Year 1										Χ	

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Exhibit R-3 Cost Analys	Exhibit R-3 Cost Analysis											
APPROPRIATION/BUDGET ACREMITED ACREM	TIVITY	PROGRAM ELE	EMENT um Center/PE 03	303153K		_		AME AND crum Cen				
Cost Category	Contract Method	Performing Activity &	Total PYs	FY 01	FY 01 Award	FY 02	FY 02 Award	Cost To	Total	Target Value of		
	& Type	Location	Cost	Cost	<u>Date</u>	Cost	<u>Date</u>	Complete	Cost	Contract		
Contractor Engineering/Technical Spt		IIT Research Inst Annapolis, MD	13.408					0	13.408	13.408		
GFE		IIT Research Inst Annapolis, MD	.800					0	.800	.800		
Engineering/Technical Support Contractor Engineering/Technical Spt	MIPR C/CPFF	Various Various	1.286 1.619	.369	Various	.328	Various	0 0	1.983 1.619	1.983 1.619		
Contractor Engineering/Technical Spt	C/CPAF	IIT Research Inst Annapolis, MD		7.359	10/00	8.051	10/01	18.201	33.611	33.611		
GFE	C/CPAF	IIT Research Inst Annapolis, MD		.470	10/00	.470	10/01	.940	1.880	1.880		
Subtotal Test & Evaluation		•	17.113	8.198		8.849						
Total			17.113	8.198		8.849						

Remarks:

Previous contract expired on 30 September 2000. Follow-on contract was competitive acquisition and began on 24 August 2000 (2 year basic with 3 option years).

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Exhibi	DATE: June 2001											
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						R-1 ITEM NOMENCLATURE Teleport Program/P.E. 0303610K						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost		
Teleport Program/NS01	0	4.500*	14.371						0	18.871		

A. Mission Description & Budget Item Justification:

The Department of Defense's (DoD) Teleport system is a phased, multigeneration approach to meet current warfighter communications reach-back requirements for a variety of scenarios, from small-scale conflicts to a major theater of war. The Teleport System is a key component that supports the Warfighting CINCs with extended multi-band satellite communication capability and seamless access to terrestrial components of the Defense Information Systems Network (DISN) for worldwide operations. The DoD Teleport System includes the X-band capabilities fielded under the Standard Tactical Entry Point (STEP) initiative. It expands throughput and enhances warfighter interoperability through access to and between existing and emerging military and commercial satellite communications systems. This program element includes operations, maintenance, life cycle management, and connectivity costs originally programmed for STEP. This system will be capable of rapid and dynamic reconfiguration to quickly respond to changing operational situations and priorities. This program element is under Budget Activity 07 because it supports operational systems development.

* This project is a new start. A congressional prior approval reprogramming request has been submitted.

This administration has not addressed FY 2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

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Exhibi	Exhibit R-2, RDT&E Budget Item Justification										
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						R-1 ITEM NOMENCLATURE Teleport Program/P.E. 0303610K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Teleport Program/NS01	0	4.500*	14.371						0	18.871	

FY 2001 Plans:

- o FY01 funds will be used to support Systems Engineering and Program Management (SEPM) and testing. Support includes: SEPM: \$4.0M requirements analysis, system/site design, system integration and development to meet an FY02 Initial Operating Capability (IOC1). Support provided by government and contractor includes site engineering, integration, preparation and review of site plans of action, Working Integrated Product Team (WIPT) support, site/equipment configuration and logistics management. (3rd Qtr -4th Qtr, \$4.0M)
- o Test and Evaluation. Teleport consists of multiple components including SATCOM terminals of multiple frequency bands, SATCOM Modems, Multiplexers, Asynchronous Transfer Mode (ATM) switches, a voice switch, and other support hardware. The Teleport system will be tested to prove functionality with deployed SATCOM users, as well as functionality with the DISN Long Haul segment and Sustaining base segment. The testing objective is to verify that the critical integration elements of the Teleport System function as required to support the deployed Warfighter. The goal is to obligate funding within 60 days of receipt of FY 01 funds (T&E):\$.5M
 - o Total \$4.500M

Exhib	Exhibit R-2, RDT&E Budget Item Justification										
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						R-1 ITEM NOMENCLATURE Teleport Program/P.E. 0303610K					
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost	
Teleport Program/NS01	0	4.500*	14.371						0	18.871	

FY 2002 Plans: The FY02 funds will be used to support Teleport Program implementation and will cover all Systems Engineering, Program Management, and test support. Support provided by government and contractor personnel includes site engineering, integration, Working Integrated Product Team (WIPT) support, site/equipment configuration and logistics management. Details follow:

- o Program Management Support will develop and update program documentation such as: Teleport Master Schedule, Teleport Program Work Breakdown Structure (WBS), Program Management Plan (PMP), Risk Management Plan (RMP), and Acquisition Strategy. Support will develop program control mechanisms, maintain program documents, provide support to Working-level Integrated Product Teams (WIPTs), provide Technical Support, support the development of the DOD Teleport architecture and design, and perform technical analysis and develop technical reports. Logistics support to the DOD Teleport Program Management Office (PMO) will provide assistance in the development of deployment and logistics plans, including the development of a Joint Logistic Support Plan (JLSP). (1st Qtr 4th Qtr, \$12.036M)
- o Testing and Evaluation for the DOD Teleport Program will provide proof of concept testing. Perform Developmental Test and Evaluation at each installed site, and Operational Test and Evaluation at each installed site. Funding will cover service installation and site certification and commissioning. (1st Otr 4th Otr, \$2.335M)
 - o Total \$14.371M

Exhib :	DATE: June 2001									
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07		R-1 ITEM NOMENCLATURE Teleport Program/P.E. 0303610K								
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost
Teleport Program/NS01	0	4.500*	14.371						0	18.871
B. Program Change Summary: Previous President's Budget (Appropriated Value Adjustments to Appropriated V Adjustments to Budget Year Si Current Budget Submit/Preside Change Summary Explanation: FY01 amount reque FY02 amount representations	N, ressional	/A	FY0 0 0 +4.5 4.5	00	FY02 0 +14.3 14.3	71				
C. Other Program Funding Sum	mary: FY00	FY01	L FY02	To Cor	mlo+o					

	<u>FY00</u>	<u>FY01</u>	<u>FY02</u>	To Complete
Operation and Maintenance: Procurement:		*2.0	4.712 97.351	Contg 0

^{*} This project is a new start. A congressional prior approval reprogramming request has been submitted.

Exhib.	Exhibit R-2, RDT&E Budget Item Justification											
APPROPRIATION/BUDGET ACTIVITY RDT&E, Defense-Wide/07						R-1 ITEM NOMENCLATURE Teleport Program/P.E. 0303610K						
COST (in millions)	FY00	FY01	FY02						Cost to Complete	Total Cost		
Teleport Program/NS01	0	4.500*	14.371						0	18.871		

D. <u>Acquisition Strategy</u>: All work will be contracted out or funded by using Military Interdepartmental Purchase Requests (MIPRs) to the Army or Navy.

E. Schedule Profile:

FY 2001

3rd - 4th Qtr

- o Systems Engineering/Program Management support provided by Teleport Program Office (TPO) support contractor, Program Manager Defense Communications Army Transmission Systems (PM DCATS), and Navy Space and Warfare Systems Command (SPAWAR)
- o Procurement support including execution and management of contracts, preparation of acquisition plans, statement of work, and Generation 1 Contract Award
- o The Teleport system will be tested to prove functionality with deployed SATCOM users, as well as functionality with the DISN Long Haul segment and Sustaining base segment.

FY 2002

1st - 4th Qtr

- o Systems Engineering/Program Management support provided by Teleport Program Office (TPO) support contractor, Program Manager Defense Communications Army Transmission Systems (PM DCATS), and Navy Space and Warfare Systems Command (SPAWAR)
- o All Quarters will have Systems Engineering/Program Management (SEPM) with document updates
- o Site Implementation for Generation One Initial Operational Capability (IOC1) (SEPT FY 2002)
- o Testing and Evaluation for the DOD Teleport Program will provide proof of concept testing. Perform Developmental Test and Evaluation at each installed site, and Operational Test and Evaluation at each installed site.

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Exhibit R-	3 Cost 2	Analysis										DATE: June 2001
								PROJECT NAME AND NUMBER Teleport Program/NS01				
Cost Category Product Development		Performing Activity & Location * Army, Ft. Monmouth, * Navy, SPAWAR, Sar		Total PYs <u>Cost</u>	FY 01 Cost 4.000	FY 01 Award <u>Date</u> TBD	FY 02 Cost 12.036	FY 02 Award Date	Cost To Complete	Total <u>Cost</u> 16.036	Target Value of Contract	
R	Cost eimbursable	•		, -								
Test and Evaluation R	Cost eimbursable	(TBD) DISA Contract			.500	TBD	2.335	10/01	0	2.835	2.835	
Total					4.500		14.371					
* Support will be a	* Support will be a combination of service provided by government and contractor support and DISA contract. Level of Support by source has not been determined.											
							Page	6 of 6				